

NOTE: Based on the scope of work, additional documentation may be required. See www.detroitmi.gov/hdc for scope-specific requirements.

PROJECT DETAILS – TELL US ABOUT YOUR PROJECT

Instructions: Add project details using the text box in each section. If your details exceed the space provided, attach the details via the attachment icon for that section.

ePLANS PERMIT NUMBER:

(only applicable if you've already applied for permits through ePLANS)

n/a

GENERAL

1. DESCRIPTION OF EXISTING CONDITION

Please tell us about the current appearance and conditions of the areas you want to change. You may use a few sentences or attach a separate prepared document on the right. (For example, "existing roof on my garage is covered in gray asphalt shingles in poor condition.")

ATTACHED



2. PHOTOGRAPHS

Help us understand your project. Please attach photographs of all areas where work is proposed.



3. DESCRIPTION OF PROJECT

In this box, tell us about what you want to do at the areas described above in box #1. (For example, "Install new asphalt shingle roofing at garage.")

ATTACHED



4. DETAILED SCOPE OF WORK

In this box, please describe all steps necessary to complete the work described in box #3. (For example, "remove existing shingles, replace wood deck as necessary, replace wood eaves, install roof vents, replace rotted fascia boards, paint, clean worksite.")

ATTACHED






5. BROCHURES/CUT SHEETS

Please provide information on the products or materials you are proposing to install. For example, a brochure on the brand and color of the shingles proposed.



ADDITIONAL DETAILS

<p>6. WINDOWS/DOORS <i>Detailed photographs of window(s) and/or door(s) proposed for replacement showing the condition of the interior and exterior of the window(s) and/or door(s)</i></p>	
<p>7. DEMOLITION <i>If demolition is proposed for reasons of structural failure or catastrophic damage, please provide illustrated report from structural engineer or licensed architect.</i></p>	
<p>8. SITE IMPROVEMENTS <i>If site improvements are proposed, please provide any relevant site improvement plans pertaining to your project.</i></p>	

DESCRIPTION OF PROJECT

This document outlines the comprehensive exterior renovation plan for the existing house, which suffered fire damage, and was destroyed by weather.

The proposed exterior renovation plan for the fire-damaged house aims to restore the property to its former state while incorporating improvements in structural integrity, energy efficiency, and safety. By meticulously replacing damaged materials, installing high-quality windows, and enhancing the outdoor areas, this renovation project will result in a harmonious blend of functionality and aesthetics, contributing positively to the overall neighborhood landscape.

The proposed exterior renovation of the historic house is a testament to the harmonious coexistence of past and present. By embracing the original openings, conformation, and character while introducing a new color scheme and compatible materials, the project seeks to honor the heritage of the house while infusing it with a fresh vitality. This renovation endeavor is poised to transform the house into a living legacy that seamlessly merges with its surroundings, contributing positively to the historical fabric and visual tapestry of the community.

DESCRIPTION OF EXISTING CONDITIONS

Front Facade.

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Wood fascia with white peeling paint.

Soffit:

- Wood soffit with white peeling paint.

Walls:

- Plywood sheathing on exterior side. (1/2" OSB)
- Tri-shield house wrap installed over west wall on exterior side. (only gable areas are not covered)

Windows:

- American Craftsman 27.75 in. x 53.25 in. 50 Series Low-E Argon Glass Double Hung White Vinyl Replacement Window, Screen Incl.

-American Craftsman

28 in. x 38 in. 50 Series Low-E Argon Glass Single Hung White Vinyl Replacement Window, Screen Incl.

- OSB sheathing over windows openings on interior side.

Doors:

- JELD-WEN 36 in. x 80 in. 6-Panel Primed Right-Hand Inswing Steel Prehung Door

Screen:

- Grisham 36 in. x 80 in. 808 Series Protector Black Surface Mount Steel Security Door with Expanded Steel Screen

Wood Balcony:

- Treated wood balcony. (unfinished)

Wood Deck:

- - Treated wood balcony. (unfinished)

Concrete Porch and steps:

- Concrete porch and steps to remain as well as brick piers.

Under-deck skirting:

- OSB sheathing.



DESCRIPTION OF EXISTING CONDITIONS

Rear View

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Wood fascia with white peeling paint.

Soffit:

- Wood soffit with white peeling paint.

Walls:

- Plywood sheathing on exterior side. (1/2" OSB)

Windows:

-American Craftsman
28 in. x 38 in. 50 Series Low-E Argon Glass Single Hung White Vinyl Replacement Window, Screen Incl.

- American Craftsman
27.75 in. x 53.25 in. 50 Series Low-E Argon Glass Double Hung White Vinyl Replacement Window, Screen Incl.

- OSB sheathing over windows openings on interior side.

Doors:

- JELD-WEN 36 in. x 80 in. 6-Panel Primed Right-Hand Inswing Steel Prehung Door

Screen:

- Grisham 36 in. x 80 in. 808 Series Protector Black Surface Mount Steel Security Door with Expanded Steel Screen

Wood Balcony:

- Treated wood balcony. (unfinished)

Wood Deck:

- - Treated wood balcony. (unfinished)

Under-deck skirting:

- OSB sheathing.



DESCRIPTION OF EXISTING CONDITIONS

North View

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Wood fascia with white peeling paint.

Soffit:

- Wood soffit with white peeling paint.



Walls:

- Plywood sheathing on exterior side. (1/2" OSB)
- Tri-shield house wrap installed over west wall on exterior side. (only gable areas are not covered)

Windows:

- American Craftsman
27.75 in. x 53.25 in. 50 Series Low-E Argon Glass Double Hung White Vinyl Replacement Window, Screen Incl.

-American Craftsman

- 28 in. x 38 in. 50 Series Low-E Argon Glass Single Hung White Vinyl Replacement Window, Screen Incl.

- OSB sheathing over windows openings on interior side.

Existing Glass-block windows on foundation wall.

Foundation wall:

- CMU wall apparent.

Doors:

- NA

Screen:

- NA

Wood Deck:

- - Treated wood balcony. (unfinished)

Under-deck skirting:

- OSB sheathing.

Under-deck skirting:

- OSB sheathing.

DESCRIPTION OF EXISTING CONDITIONS

South View

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Wood fascia with white peeling paint.

Soffit:

- Wood soffit with white peeling paint.

Walls:

- Plywood sheathing on exterior side. (1/2" OSB)
- Tri-shield house wrap installed over west wall on exterior side. (only gable areas are not covered)

Windows:

- American Craftsman 28 in. x 38 in. 50 Series Low-E Argon Glass Single Hung White Vinyl Replacement Window, Screen Incl.
- Existing Glass-block windows on foundation wall.
- OSB sheathing over windows openings on interior side.

Doors:

- JELD-WEN 36 in. x 80 in. 6-Panel Primed Right-Hand Inswing Steel Prehung Door

Screen:

- Grisham 36 in. x 80 in. 808 Series Protector Black Surface Mount Steel Security Door with Expanded Steel Screen

Wood Balcony:

- Treated wood balcony. (unfinished)

Wood Deck:

- - Treated wood balcony. (unfinished)

Concrete Porch and steps:

- Concrete porch and steps to remain as well as brick piers.

Under-deck skirting:

- OSB sheathing.



DESCRIPTION OF EXISTING CONDITIONS

Garage

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Damaged wood fascia with white peeling paint.

Walls:

- Plywood sheathing on exterior side. (1/2" OSB))

Windows:

- OSB sheathing over windows openings on interior side.

Doors:

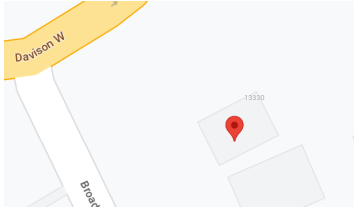
- NA



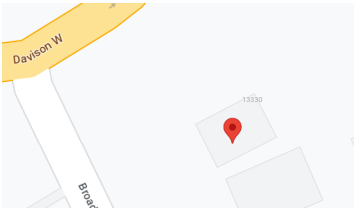
CURRENT PHOTOGRAPHS

Front Facade.

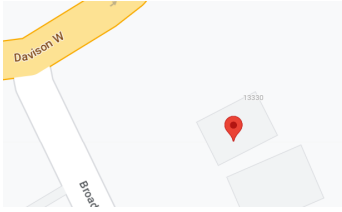
Broadstreet Ave



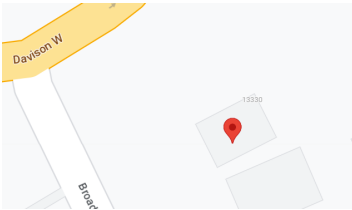
Rear View



North View.



South View



DESCRIPTION OF EXISTING CONDITIONS

Garage

Roof:

- Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Fascia:

- Damaged wood fascia with white peeling paint.

Walls:

- Plywood sheathing on exterior side. (1/2" OSB))

Windows:

- OSB sheathing over windows openings on interior side.

Doors:

- NA



SCOPE OF WORK

The scope of this exterior renovation proposal encompasses the following key elements:

The primary objective of this renovation is to restore the structure to its pre-fire condition while integrating necessary safety measures and aesthetic enhancements.

- New siding installation (House and garage).
- Window Installation on existing openings (House and garage).
- Existing treated wood front deck to be painted. (white)
- Existing treated wood rear deck to be painted. (white)
- Existing treated wood balconies to be painted. (white)
- Landscaping and Outdoor Area Restoration
- New Stone Veneer Siding installation on under deck skirting and exposed foundation walls
- New 6" aluminum fascia installation (House and garage).
- New 12" aluminum soffit installation
- New 6" aluminum exterior window trim installation (House and garage).
- New garage door installation
- New aluminum gutters and downspouts installation (House and garage).

DESCRIPTION OF PROPOSAL WORK

Front Facade

Existing Roof: - Timberline
Natural Shadow Charcoal Algae
Resistant Architectural Shingles



6 in. x 12 ft. Aluminum
Fascia Trim with Smoc
Finish in Birch White.
(TYP.)

American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

Painted treated
wood deck.

ELD-WEN 30 in.
x 80 in. 6-Panel
Inswing Steel
Prehung Door

JELD-WEN 36
in. x 80 in.
3-Panel Inswing
Steel Prehung
Door



Stone Master®
Sahara
Barcelonetta
Manufactured Stone
Veneer Siding



TimberCrest®
Plus ColorFast™
Double 4" x 12'
6" Nordic Blue
Vinyl Siding

*Please review specifications and
details provided for proposal materials.

PROPOSAL WORK

North View



PROPOSAL WORK

Rear View



Doors and windows proposal Layout

The windows will be installed on the existing openings.

28 in. x 38 in.
American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

27.75 in. x 53.25 in.
Costume fixed window



JELD-WEN 30 in.
< 80 in. 6-Panel
Inswing Steel
Prehung Door

JELD-WEN 36
in. x 80 in.
3-Panel Inswing
Steel Prehung
Door

North View

28 in. x 38 in.
American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)



American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

27.75 in. x 53.25 in.

PROPOSAL WORK

Rear View

28 in. x 38 in.

American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

American Craftsman
Low-E Argon Glass
Double Hung White
Vinyl Window. (TYP.)

27.75 in. x 53.25 in.



Windows

American Craftsman White Vinyl Replacement Window. (dimensions variable)

The Series 50 Single Hung Buck vinyl window by American Craftsman, combines aesthetic appeal, energy efficiency and low-maintenance with proven performance..

For window replacement in existing openings

Flat and sleek exterior frame is designed to deliver a modern appearance

Energy efficient Low-E glass helps save on heating and cooling bill

Durable vinyl is low maintenance and retains its beauty without painting

Dual weatherstripping helps keep out dust, air, and water with a tight seal

Details

Exterior Color/ Finish	White	Exterior Color/Finish Family	White
Features	Tilt-In Cleaning	Frame Material	Vinyl
Frame Type	Block Frame	Glass Type	Low-E Glass
Glazing Type	Double-Pane	Grid Pattern	No Grid
Grille Type	No Grille	Hardware Color/Finish Family	White
Included	Hardware, Screen	Interior Color/Finish Family	White
Lock Type	Cam Action	Number of Grids	No Grid
Number of Locks	1	Product Weight (lb.)	26 lb
Solar Heat Gain Coefficient	0.26	U-Factor	.29
Window Type	Other	Window Use Type	Replacement

Warranty / Certifications

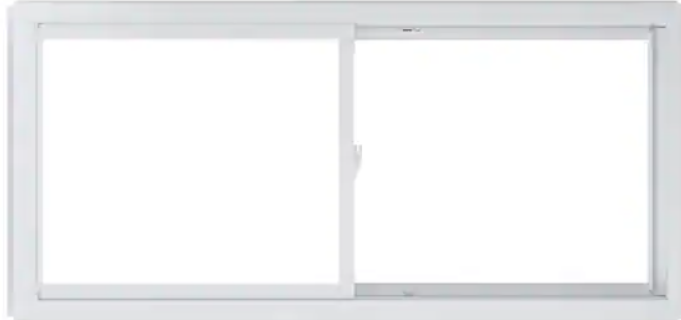
Energy Star Qualified	North-Central	Manufacturer Warranty	Limited Lifetime Warranty
-----------------------	---------------	-----------------------	---------------------------



28 in. x 38 in.



27.75 in. x 53.25 in.



96 in. x 54 in.

* See technical sheets attached for more details

Door

JELD-WEN

36 in. x 80 in. 6-Panel Primed Right-Hand Inswing Steel Prehung Front Door w/Brickmould.

Boasting long-lasting beauty, durability and easy maintenance, JELD-WEN Premium Steel Pre-Hung Front Doors are a classic addition to your entryway. Their high definition panels create an upscale look that adds architectural interest for increased curb appeal. Each of these steel doors were built with a strong and secure construction to prevent water absorption and resist rust.



Dimensions

Door Height (in.)	81.75 in	Door Thickness (in.)	1.75 in
Door Width (in.)	37.438 in	Jamb Size (in.)	4-9/16"
Nominal Door Height (in.)	80 in	Nominal Door Thickness (in.)	2 in
Nominal Door Width (in.)	36 in	Rough Opening Height (in.)	82.5 in
Rough Opening Width (in.)	39.9375 in		

Details

Bore Type	Double Bore	Color Family	Off White
Color/Finish	Primed	Door Configuration	Single Door
Door Handing	Right-Hand/Inswing	Door Style	Traditional
Door Type	Exterior Prehung	Features	Brickmold, Lockset Bore (Double Bore), Weatherstripping
Finish Type	Primed	Frame Material	Wood
Hinge Finish	Satin Nickel	Hinge Type	Standard
Included	Instructions	Material	Steel
Number of Hinges	3	Panel Type	6 Panel

* See technical sheets attached for more details

Screen:

Grisham 30 in. x 80 in. 808 Series Protector Black Surface Mount Steel Security Door with Expanded Steel Screen.

The Grisham 808 series Protector Security screen door has a 3/4 in. diameter welded steel frame, and a heavy duty expanded metal screen inlay for added security and ventilation. The Protector security door is designed be Surface Mounted for either left or right hinging preference, and has three tamper resistant hinges for additional protection from forced entry.

Made of 16-Gauge steel for security and strength
 Sturdy 3/4 in. x 3/4 in. welded steel door frame
 1 in. x 1 in. steel jamb and header with concealed fastener locations
 Surface mounts to face of entry way
 Prehung and pre-hinged for ease of installation
 Reversible for right or left hinging options
 Expanded steel screen inlay for added protection and airflow
 Tamper-resistant hinges for added security
 Double-bore lock box fits most 2-3/8 in. back-set lock sets
 Includes non-reversing safety installation screws
 Powder coated for a long lasting protective finish
 Available in color black or white
 Available in 80 in. height only and widths 30 in., 32 in., 34 in., and 36 in.
 Surface mount installation

**Dimensions**

Actual Door Height (in.)	80 in	Actual Door Thickness (in.)	0.75
Actual Door Width (in.)	36 in	Door Height (in.)	80 in
Door Thickness (in.)	0.75 in	Door Width (in.)	36 in
Nominal Door Height (in.)	80 in	Nominal Door Thickness (in.)	1 in
Nominal Door Width (in.)	36 in		

Details

Color Family	Black	Color/Finish	Powder Coated Black
Door Configuration	Single Door	Door Handing	Universal/Reversible
Door Type	Security	Finish Type	Painted
Included	Hardware	Material	Steel
Mount Type	Surface Mount	Product Weight (lb.)	51 lb
Returnable	90-Day		

* See technical sheets attached for more details

BROCHURES / CUT SHEETS

Roof:

GAF Timberline Natural Shadow Charcoal Algae Resistant Architectural Shingles

Dimensions

Coverage Area (sq. ft.)	33.33 sq ft	Product Length (in.)	39.38 in
Product Thickness (in.)	2.4 in	Product Width (in.)	13.25 in

Details

Color Family	Black	Color/Finish	Charcoal
Features	Algae Resistant, High Wind Resistant, Stainguard Protection	Fire Rating (UL 790)	Class A
Material	Asphalt	Number of bundles per 100 sq. ft. (Square)	3
Number of pieces per bundle	21	Requirements	Attic Ventilation, Underlayment
Roofing Product Type	Architectural Shingle	Shingle Exposure (in.)	5.625
Shingle Type	Architectural Shingle	Warranty	Lifetime Limited Warranty
Weight Per Bundle (lb.)	70		



* See technical sheets attached for more details

Siding:

TimberCrest® Plus ColorFast™ Double 4" Nordic Blue Vinyl Siding
Model Number: VMTP40596 Menards ® SKU: 1460789

TimberCrest® vinyl siding is molded from real rough cedar planks and features a .046-inch thickness for impact resistance. Its four-inch profile presents an authentic wood appearance with deep shadow lines. TimberCrest's® 3/4-inch profile height and double-thick nail hem provide enhanced rigidity and wind load resistance up to 216 miles per hour.

Features

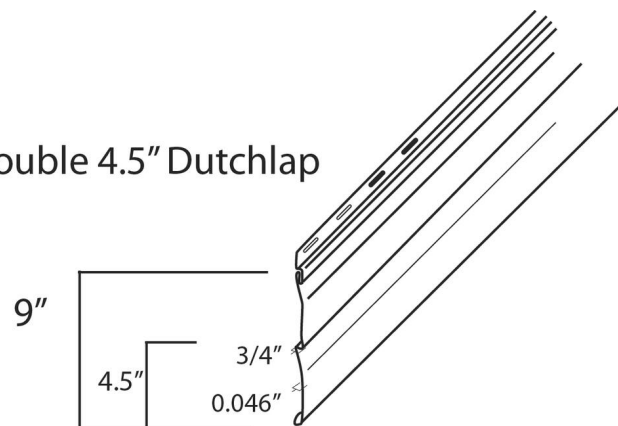
- .046" thickness
- 15% thicker than standard vinyl siding
- 12 pieces cover 100 sq ft
- Each 8" x 12' 6" piece covers 8.33 sq ft
- Transferable limited lifetime warranty
- 50-year fade resistance warranty
- Meets or exceeds ASTM D3679
- Rough cedar woodgrain
- 216 MPH wind rating

Specifications

Siding Profile	Double 4"	Thickness	0.046 inch
Material	Vinyl	Siding Surface Design	Cedar Texture
Overall Width	8 inch	Overall Length	12.5 foot
Exposure	8 inch	Coverage Per Piece	8.33 square foot
Manufacturer Warranty	Limited Lifetime	Special Features	Low Maintenance
Maximum Wind Resistance	216 miles per hour	Listing Agency Standards	ASTM D4216
Shipping Dimensions	150.00 H x 9.00 W x 0.75 D	Shipping Weight	4.625 lbs
Return Policy	Regular Return (view Return Policy)		



Double 4.5" Dutchlap



* See technical sheets attached for more details

Windows

American Craftsman White Vinyl Replacement Window. (dimensions variable)

The Series 50 Single Hung Buck vinyl window by American Craftsman, combines aesthetic appeal, energy efficiency and low-maintenance with proven performance..

For window replacement in existing openings

Flat and sleek exterior frame is designed to deliver a modern appearance

Energy efficient Low-E glass helps save on heating and cooling bill

Durable vinyl is low maintenance and retains its beauty without painting

Dual weatherstripping helps keep out dust, air, and water with a tight seal

Details

Exterior Color/ Finish	White	Exterior Color/Finish Family	White
Features	Tilt-In Cleaning	Frame Material	Vinyl
Frame Type	Block Frame	Glass Type	Low-E Glass
Glazing Type	Double-Pane	Grid Pattern	No Grid
Grille Type	No Grille	Hardware Color/Finish Family	White
Included	Hardware, Screen	Interior Color/Finish Family	White
Lock Type	Cam Action	Number of Grids	No Grid
Number of Locks	1	Product Weight (lb.)	26 lb
Solar Heat Gain Coefficient	0.26	U-Factor	.29
Window Type	Other	Window Use Type	Replacement

Warranty / Certifications

Energy Star Qualified	North-Central	Manufacturer Warranty	Limited Lifetime Warranty
-----------------------	---------------	-----------------------	---------------------------



28 in. x 38 in.



27.75 in. x 53.25 in.



96 in. x 54 in.

* See technical sheets attached for more details

Fascia:

Gibraltar Building Products

6 in. x 12 ft. Aluminum Fascia Trim with Smooth Finish in Birch White

This Gibraltar 6 in. x 12 ft. birch white aluminum fascia trim is the perfect finish to your home. It features a smooth, enamel-coated surface and a ribbed design for stability. The birch white finish is highly versatile and the aluminum construction with hemmed edges is maintenance free. The hemming is also safe to handle when installing.

Aluminum is a trusted, low-maintenance product that is known for durability

Polyester-baked enamel coat with a smooth finish

Protects wood fascia boards, eliminates the need to paint

Every piece meets the highest grading standards for strength and appearance

Hemmed for safer handling when installing

Ribs add stability

Dimensions

Product Length (in.)	12 ft	Product Thickness (in.)	0.024 in
Product Width (in.)	6 in		

Details

Color Family	White	Color/Finish	White
Features	No Additional Features	Finish Type	Finished
Material	Aluminum	Trim type	Fascia



* See technical sheets attached for more details

Door

JELD-WEN

36 in. x 80 in. 6-Panel Primed Right-Hand Inswing Steel Prehung Front Door w/Brickmould.

Boasting long-lasting beauty, durability and easy maintenance, JELD-WEN Premium Steel Pre-Hung Front Doors are a classic addition to your entryway. Their high definition panels create an upscale look that adds architectural interest for increased curb appeal. Each of these steel doors were built with a strong and secure construction to prevent water absorption and resist rust.



Dimensions

Door Height (in.)	81.75 in	Door Thickness (in.)	1.75 in
Door Width (in.)	37.438 in	Jamb Size (in.)	4-9/16"
Nominal Door Height (in.)	80 in	Nominal Door Thickness (in.)	2 in
Nominal Door Width (in.)	36 in	Rough Opening Height (in.)	82.5 in
Rough Opening Width (in.)	39.9375 in		

Details

Bore Type	Double Bore	Color Family	Off White
Color/Finish	Primed	Door Configuration	Single Door
Door Handing	Right-Hand/Inswing	Door Style	Traditional
Door Type	Exterior Prehung	Features	Brickmold, Lockset Bore (Double Bore), Weatherstripping
Finish Type	Primed	Frame Material	Wood
Hinge Finish	Satin Nickel	Hinge Type	Standard
Included	Instructions	Material	Steel
Number of Hinges	3	Panel Type	6 Panel

* See technical sheets attached for more details

Screen:

Grisham 30 in. x 80 in. 808 Series Protector Black Surface Mount Steel Security Door with Expanded Steel Screen.

The Grisham 808 series Protector Security screen door has a 3/4 in. diameter welded steel frame, and a heavy duty expanded metal screen inlay for added security and ventilation. The Protector security door is designed be Surface Mounted for either left or right hinging preference, and has three tamper resistant hinges for additional protection from forced entry.

Made of 16-Gauge steel for security and strength
 Sturdy 3/4 in. x 3/4 in. welded steel door frame
 1 in. x 1 in. steel jamb and header with concealed fastener locations
 Surface mounts to face of entry way
 Prehung and pre-hinged for ease of installation
 Reversible for right or left hinging options
 Expanded steel screen inlay for added protection and airflow
 Tamper-resistant hinges for added security
 Double-bore lock box fits most 2-3/8 in. back-set lock sets
 Includes non-reversing safety installation screws
 Powder coated for a long lasting protective finish
 Available in color black or white
 Available in 80 in. height only and widths 30 in., 32 in., 34 in., and 36 in.
 Surface mount installation

**Dimensions**

Actual Door Height (in.)	80 in	Actual Door Thickness (in.)	0.75
Actual Door Width (in.)	36 in	Door Height (in.)	80 in
Door Thickness (in.)	0.75 in	Door Width (in.)	36 in
Nominal Door Height (in.)	80 in	Nominal Door Thickness (in.)	1 in
Nominal Door Width (in.)	36 in		

Details

Color Family	Black	Color/Finish	Powder Coated Black
Door Configuration	Single Door	Door Handing	Universal/Reversible
Door Type	Security	Finish Type	Painted
Included	Hardware	Material	Steel
Mount Type	Surface Mount	Product Weight (lb.)	51 lb
Returnable	90-Day		

* See technical sheets attached for more details

Stone:

Stone Master® Sahara Barcelonetta Manufactured Stone Veneer Siding (4.41 sq. ft.)
 Model Number: 1446710 Menards® SKU: 1446710

Features

An affordable, lightweight alternative to real stone

Easy to install

Durable

Adds lasting value to your home or business

Exterior or interior use

20-year limited warranty

Matching corners are not available for this SKU, corners can be made by mitering the flats.

Type 1 Mastic required for installation in interior applications

Mortar required for installation on exterior applications

Specifications

Product Type	Manufactured Stone Panels	Material	Concrete
Coverage Area	4.41 square foot	Nominal Height	3-3/4 inch
Nominal Length	14-1/4 inch	Nominal Thickness	1 inch
Color	Sahara	Recommended Environment	Interior & Exterior
Includes	Stone Only	Style	Mortar Applied
Manufacturer Warranty	20 year	Weight	24.86 pound
Shipping Dimensions	31.00 H x 16.00 W x 5.00 D	Shipping Weight	24.875 lbs
Return Policy	Special Order Merchandise (view Return Policy)		



* See technical sheets attached for more details

Material Safety Data Sheet

Material Name: Precast Stone Veneer

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Stone Master S.A.
125 Rokicinska Street
95-020 Andrespol
Poland

Phone: 781-335-4466

*** Section 2 - Hazards Identification ***

Emergency Overview

No unusual conditions are expected from this product. Inhalation of dusts produced during dry cutting, sawing, grinding, sanding, breaking, or drilling of this product may cause irritation of the respiratory tract.

Potential Health Effects: Eyes

Dust from this product may cause slight irritation to the eyes including redness, tearing and blurred vision. Such exposures require immediate first aid (see Section 4) and may require medical attention to prevent damage to the eye.

Potential Health Effects: Skin

Dust from this product may cause itching and short-term irritation.

Potential Health Effects: Ingestion

Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Potential Health Effects: Inhalation

Exposure to dust generated from Precast Stone Veneer in excess of the applicable TLV or PEL's (see Section 2) may cause or aggravate other lung conditions. Concrete Precast Stone Veneer contain mineral dust and crystalline silica which may be released as dust when dry cutting, sawing, grinding, sanding, breaking or drilling. Dusts of this product may cause irritation of the nose, throat, and respiratory tract by mechanical abrasion. Prolonged and repeated inhalation of respirable crystalline silica can cause silicosis, a chronic lung disease characterized by fibrosis and scarring of the lung tissue resulting in a decrease in lung function, breathlessness, wheezing, coughing and sputum production.

Short-term overexposures to extremely high concentrations of respirable crystalline silica can produce acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that can be fatal; over exposure has reportedly caused death within 1 to 2 years. Symptoms include (but are not limited to) shortness of breath, cough, fever, weight loss, and chest pain.

Medical Conditions Aggravated by Exposure

Chronic respiratory or skin conditions may temporarily worsen from exposure to dust from this product. Precast stone veneer is not listed as a carcinogen by NTP, OSHA, or IARC. It contains crystalline silica, and may contain trace amounts of substances listed as carcinogens by these organizations: hexavalent chromium, lead compounds, mercury compounds, nickel compounds, arsenic, cadmium and cadmium compounds, cobalt II oxide, aniline, and possibility other chemicals which may result in exposures which require the following warning pursuant to California Proposition 65.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
1332-09-8	Pumice	0-60
65997-15-1	Portland cement	0-40
112945-52-5	Silica, amorphous, fumed, crystal-free	0-30
14808-60-7	Quartz	0-30
1344-28-1	Aluminum oxide	0-13.5
1310-73-2	Sodium hydroxide	0-10
1309-37-1	Iron oxide	0-5
1305-78-8	Calcium oxide	0-4.5
1308-38-9	Chromium (III) oxide	0-3

Material Safety Data Sheet

Material Name: Precast Stone Veneer

1309-48-4	Magnesium oxide fume	0-1
-----------	----------------------	-----

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing to remove all particles. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

First Aid: Skin

For skin contact, wash with soap and water. Contact a physician if irritation persists or later develops.

First Aid: Ingestion

Ingestion of this material is unlikely. If it does occur, watch the person for several days to make sure that partial or complete intestinal obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel.

First Aid: Inhalation

Do not induce vomiting. If inhaled, immediately remove the affected person to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.
None identified

Hazardous Combustion Products

None

Extinguishing Media

This product is non-combustible. Use any extinguishing media appropriate for the surrounding fires.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

Scoop up materials and put into a suitable container for disposal as a non-hazardous waste. Dust from dry cutting, sawing, grinding, sanding, or drilling of this material will settle out of the air. If concentrated on land, it can then be scooped up for disposal as a non-hazardous waste.

Clean-Up Procedures

Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly; do not wash into storm drains or water way. Wear appropriate protective equipment during cleanup. Avoid the generation of dusts during clean up.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

No special procedures are required for this material. Avoid breathing dusts from this material. Avoid dust contact with eyes and skin. Minimize generation of dusts. Promptly remove dusty clothing and launder before use.

Storage Procedures

No special procedures are required for this material.

Material Safety Data Sheet

Material Name: Precast Stone Veneer

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

A: General Product Information

Concrete stone veneer contains mineral dust and crystalline silica, which may be released as dust when dry cutting, sawing, grinding, sanding, or drilling. Follow all applicable exposure limits if dusts are generated.

B: Component Exposure Limits

Portland cement (65997-15-1)

ACGIH: 10 mg/m³ TWA (particulate matter containing no asbestos and <1% crystalline silica)
OSHA: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)
NIOSH: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable dust)

Quartz (14808-60-7)

ACGIH: 0.025 mg/m³ TWA (respirable fraction)
OSHA: 0.1 mg/m³ TWA (respirable dust)
NIOSH: 0.05 mg/m³ TWA (respirable dust)

Aluminum oxide (1344-28-1)

OSHA: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

Sodium hydroxide (1310-73-2)

ACGIH: 2 mg/m³ Ceiling
OSHA: 2 mg/m³ Ceiling
NIOSH: 2 mg/m³ Ceiling

Iron oxide (1309-37-1)

ACGIH: 5 mg/m³ TWA (respirable fraction)
OSHA: 10 mg/m³ TWA (fume)
NIOSH: 5 mg/m³ TWA (Fe, dust and fume)

Calcium oxide (1305-78-8)

ACGIH: 2 mg/m³ TWA
OSHA: 5 mg/m³ TWA (not in effect as a result of reconsideration)
NIOSH: 2 mg/m³ TWA

Magnesium oxide fume (1309-48-4)

ACGIH: 10 mg/m³ TWA (inhalable fraction)
OSHA: 10 mg/m³ TWA (total particulate)

Engineering Controls

ACGIH and OSHA have determined that adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLV/PEL. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals, including persons with pre-existing medical conditions such as those described below.

Ventilation:

General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits. Dust collection systems may be necessary in some operations.

Local Exhaust Ventilation:

When dry cutting, sawing, grinding, breaking, or drilling precast stone veneer, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section II. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice." Latest edition.

Work/Hygienic Practices:

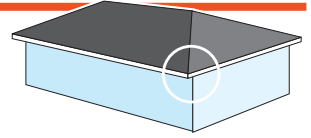
Avoid creating and breathing dust. Do not eat, drink, or smoke in the work area.

Soffit & Fascia Installation Tips

Do not over nail fascia trim. Recommended: One nail every 36 in.

Hip Roof

4-way overhang



Fascia Corners Cut bottom flange and bend 1" of end to make lap fold and form box at corner. Place next piece to overlap and continue installation.

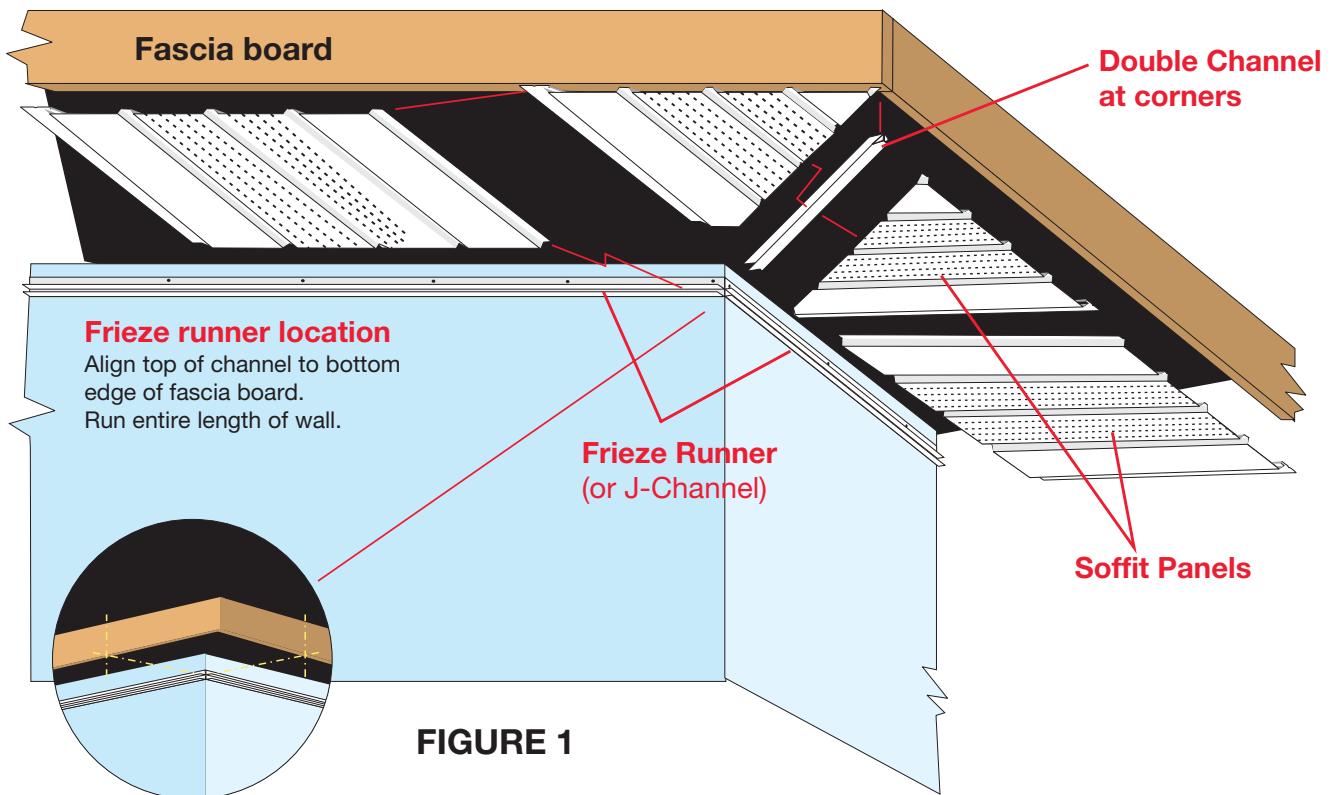
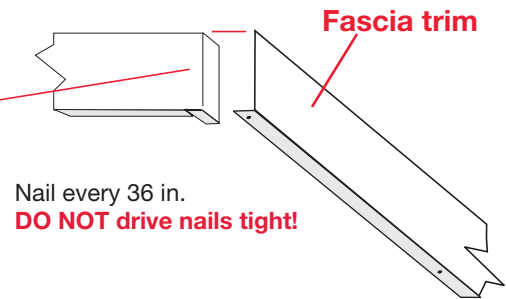
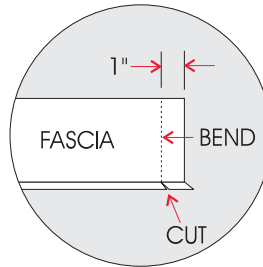


FIGURE 1

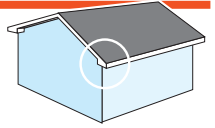
Using frieze runner channel:* (Refer to Figure 1)

- FRIEZE RUNNER** - Bottom edge of runner channel must be level and aligned with the bottom surface of the fascia board. Using nailing flange of channel, nail and install along the entire length of the wall surface.
- DOUBLE-CHANNEL** - To join panels at corners, cut double channel to fit and match angle when positioned diagonally from frieze channel to corner of fascia board.
- SOFFIT PANELS** - Cut at 45° for corner areas, slide into channel and secure into position using nails in panel grooves as required, to under edge of fascia board. Continue panel installation for entire length.
- FASCIA TRIM** - Beginning at corner, position up snug to underside of soffit panels, pre-drill (align with soffit grooves) and nail through bottom lip of fascia trim every 36" along bottom edge of fascia board. NEVER 'face nail' fascia. DO NOT drive nails tight — fascia must be 'hung', not tight, to allow expansion and help prevent distortion. Allow at least 1" overlap of fascia where lengths meet.
- FINISH TRIM** - Use drip edge, gutter or all-purpose trim to cover and finish top edge of fascia trim.

* If installing soffit panels over existing wood soffits, soffit 'J' channel can be used in place of frieze runner and double channel.

Soffit & Fascia Installation Tips

Gable End Roof



Do not over nail fascia trim. Recommended: One nail every 36 in.

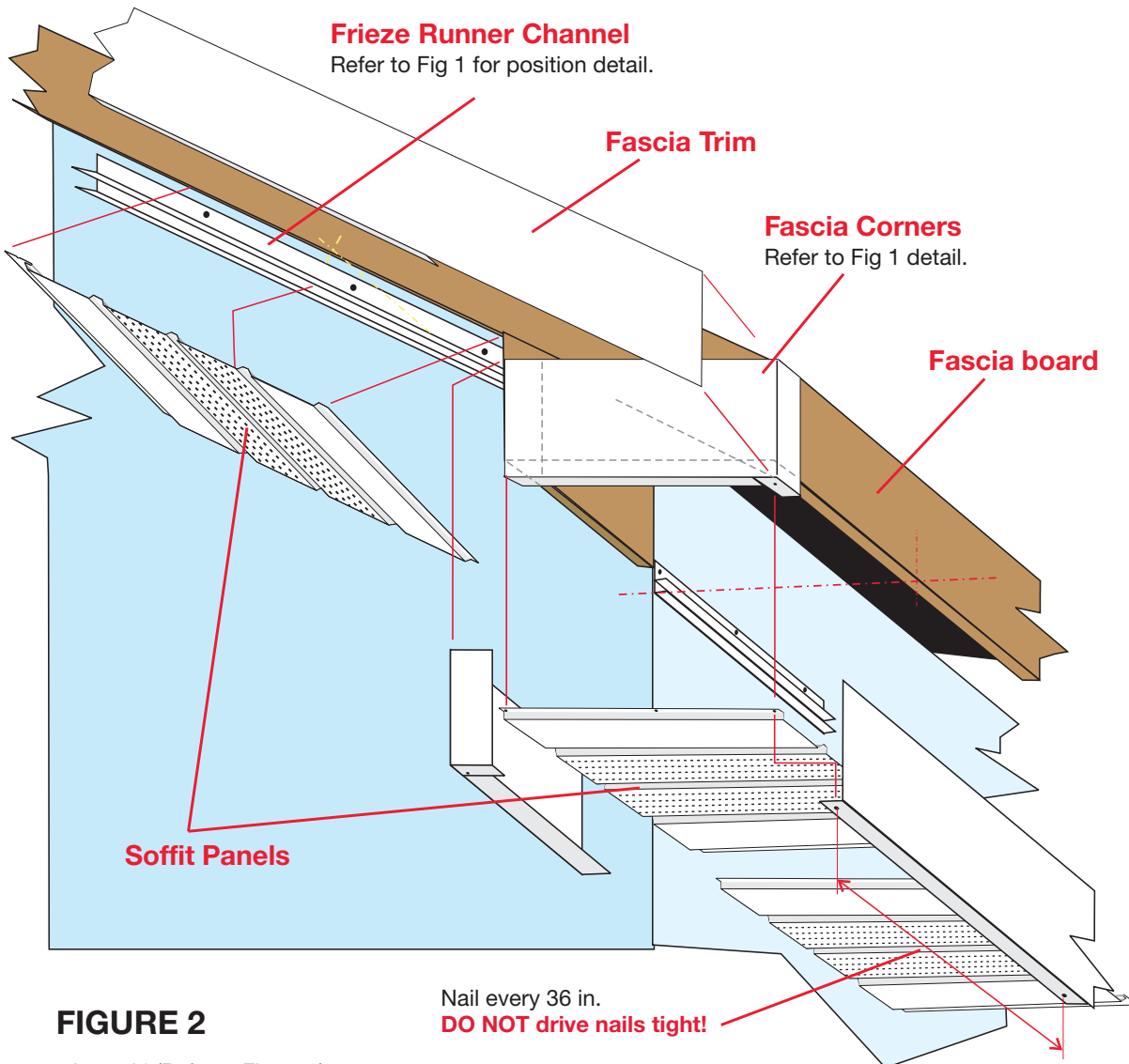


FIGURE 2

Nail every 36 in.

DO NOT drive nails tight!

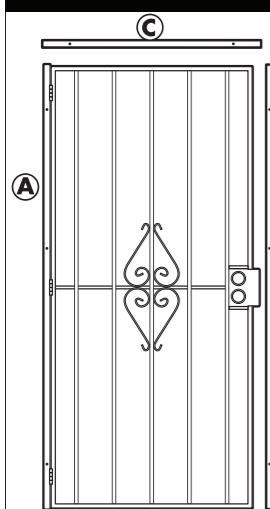
Using frieze runner channel:* (Refer to Figure 2)

1. **FRIEZE RUNNER** - Bottom edge of runner channel must be level and aligned with the bottom surface of the fascia board. Using nailing flange of channel, nail and install along the entire length of the wall surfaces and up to gable peak on side wall.
2. **SOFFIT PANELS** - gable end - Start installation at the base of the gable end working up to the peak as far as full panels will fit. Slide panels into channel and secure into position using nails in panel grooves as required, to under edge of fascia board. When both sides are done to this point, it may be necessary to cut a panel, bend to match peak angle and rebend edges to make interlocking jointings. Slide peak panel into position and nail.
- 2a. **SOFFIT PANELS** - other sides - Starting from one end, slide into channel and secure into position using nails in panel grooves as required, to under edge of fascia board. Continue panel installation for entire side.
3. **FASCIA TRIM** - Beginning at corners, cut and bend to form box (see Fig 2), position up snug to underside of soffit panels, pre-drill (align with soffit grooves) and nail through bottom lip of fascia trim every 36" along bottom edge of fascia board. NEVER 'face nail' fascia. DO NOT drive nails tight — fascia must be 'hung', only snug to soffit, to allow expansion and help prevent distortion. Allow at least 1" overlap of fascia where lengths meet. Cover balance of gable end with fascia trim and cut to make overlap joint at peak.
4. **FINISH TRIM** - Use drip edge or all-purpose trim to cover and finish top edge of fascia trim.

* If installing soffit panels over existing wood soffits, soffit 'J' channel can be used in place of frieze runner.



Installation Instructions & Warranty For SD-808 Protector Security Screen Door



Important Sizing Information:

- Intended for surface mounting to exterior door frame. **Customer Service:** 1-800-647-6736 7:00 am to 4:30 pm CST

Door Size	Rough Opening Width Fit Range.	Rough Opening Height Fit Range.
30" x 80"	29-1/2" to 30-1/2"	79-3/4" to 80-1/2"
32" x 80"	31-1/2" to 32-1/2"	79-3/4" to 80-1/2"
34" x 80"	33-1/2" to 34-1/2"	79-3/4" to 80-1/2"
36" x 80"	35-1/2" to 36-1/2"	79-3/4" to 80-1/2"



Tools Required:

- Electric Drill
- 1/8" Diameter Drill Bit
- Flat Head Screwdriver
- Tape Measure
- Level
- Pencil
- Wood shims
- Blocks of wood

- MEASURE WIDTH:
At top, center, and bottom of opening.
- MEASURE HEIGHT:
At both sides of opening from threshold to door header.

Door diagram A, B, and C.

INSTALLATION: Step 1. Diagram Side A

- Position door with hinge side assembly onto door frame in desired hinge/swing orientation.
- Allow for a 1/8" inch gap between the lockside edge of the door and adjacent mounting surface.
- Allow for a 1/8" inch gap between the top edge of the door and the bottom edge of adjacent top mounting surface.

(Blocks of wood placed under the bottom of the door will help facilitate holding the door in position during the planning and installation process.)

- Mark locations of hinge side mounting holes with a pencil, and proceed to drill 1/8" inch diameter pilot holes at marked locations. Keeping the door plumb and square, begin to fasten the hinge side assembly using the non-reversing safety screws provided.

(Fasten screws until flush within the tubing cavity.)

Step 2.

- Install the lockset within the doors lockbox according to the lock manufactures installation instructions. Fully engage the deadbolt lock and striker.

(Lockset not included.) Requires standard 2 3/8" backset lockset.

Step 3. Diagram Side B

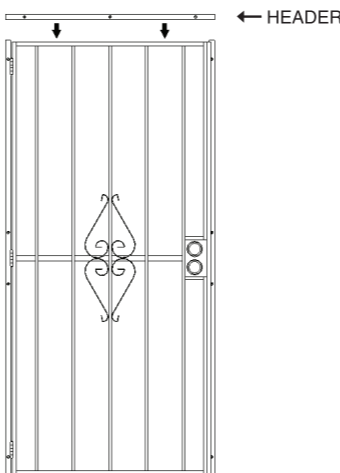
- With the lock bolts extended, align the lock bolts with the strike side latching jamb holes. Make sure the lock bolts can freely engage the strike side jamb.
- Allow for a 3/16" of an inch reveal between the edge of the door and the strike side jamb.
- Mark locations of strike side jamb mounting holes with a pencil. Remove strike side jamb and proceed to drill 1/8" diameter pilot holes at marked locations. Reposition strike side jamb at pre-drilled locations, and begin to fasten the strike side jamb using the non-reversing safety screws provided.

(Fasten screws until flush within the tubing cavity.)

Step 4. Diagram Side C

- Final step: Position top header jamb across top of door while leaving a minimum 1/8" reveal between the header jamb and the top of the door frame.
- Remove header and proceed to drill 1/8" diameter pilot holes at marked locations.
- Reposition header onto mounting surface, and secure with non-reversing safety screws provided.

Installation is complete.



Limited Lifetime Warranty

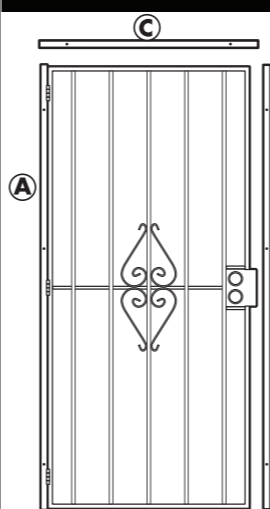
The welded frame, pickets and lock box of a Grisham Security door is warranted against breakage for as long as you own the home on which the Grisham door has been installed. Should a weld break or structural defect exist, Grisham will repair or replace the door at our discretion. This warranty does not cover damage caused by vandals, break-ins, or attempted break-ins. Components that prove to be defective in material or workmanship are warranted for a period of 1-year. (Excluding Glass and Screen).

Your Grisham security door is warranted against paint defects and rust for a period of 1-year from the date of purchase. Rust and paint finish claims may not be the result of abrasions, abuse, misuse, alterations, or negligence. "Grisham assumes no other expense such as labor costs of any kind for removal, replacement parts, repairs, or reinstallation"

Warranty questions or claims. Please call 1-800-238-1005 7:00 to 4:30 pm CST. Thank You.



Instrucciones de instalación y garantía Para SD- 808 Protector de Pantalla de Seguridad Puerta



Información de tamaño importante:

- Diseñado para montaje en superficie para marco de puerta exterior. **Servicio al cliente:** 1-800-647-6736 7:00 am - 4:30 pm CST

Tamaño puerta	Abertura no acabada Ajustar ancho rango	Altura abertura en la pared rango de colocación
30" x 80"	29-1/2" to 30-1/2"	79-3/4" to 80-1/2"
32" x 80"	31-1/2" to 32-1/2"	79-3/4" to 80-1/2"
34" x 80"	33-1/2" to 34-1/2"	79-3/4" to 80-1/2"
36" x 80"	35-1/2" to 36-1/2"	79-3/4" to 80-1/2"



- Medida de ancho:
en la superior, centro e inferior de la abertura.
- Mida la altura:
en ambos lados de la abertura del umbral a la cabecera de la puerta.

Herramientas requeridas:

- Taladro eléctrico
- 1/8" diámetro broca
- Destornillador de cabeza plana
- Cinta métrica
- Nivel
- Lápiz
- Madera cuñas
- Bloques de madera

Diagrama de puertas A, B y C.

INSTALACIÓN: Paso 1. Diagrama Lado A

- Coloque la puerta con el montaje del lado de las bisagras de la puerta sobre el marco en orientación de articulación / oscilación deseada.
- Permitir un espacio de 1/8 "de pulgada entre el borde Lockside de la puerta y montaje adyacente superficie.
- Permitir una "brecha de 1/8 pulgada entre el borde superior de la puerta y el borde inferior del adyacente superficie de montaje superior.

(Bloques de madera colocados debajo de la parte inferior de la puerta ayudará a facilitar la celebración de la puerta en su posición durante el proceso de planificación e instalación.)

- Marque la ubicación del lado de las bisagras agujeros con un lápiz de montaje, y proceder a perforar 1/8"pulgadas de diámetro agujeros piloto en los lugares marcados. Mantener la puerta y la plomada cuadrado, comienzan a fijar el ensamblaje lado de las bisagras utilizando los tornillos de seguridad de marcha atrás no previstas.

(Apriete los tornillos hasta que quede nivelado dentro de la cavidad del tubo.)

Paso 2.

- Instalar la cerradura dentro de las puertas de la caja de seguridad de acuerdo con la cerradura fabrica Instrucciones de instalación. participar plenamente la cerradura de seguridad y el delantero.

(Lockset no incluido.) Requiere estándar de 2 3/8 "juego de cerradura de pestillo.

Paso 3. Diagrama Lado B

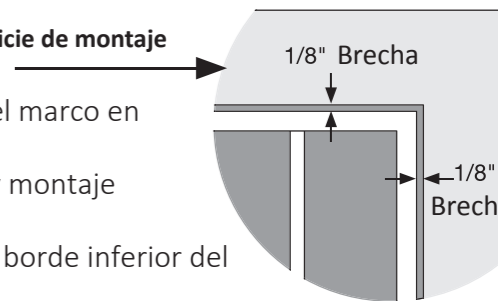
- Con los tornillos de fijación extendida, alinear los pernos de seguridad con enclavamiento el lado huelga orificios de la jamba. Asegúrese de que los pernos de seguridad pueden dedicarse libremente la jamba lateral huelga.
- Permitir a un 3/16 "de pulgada revelan entre el borde de la puerta y la jamba lateral huelga.
- Marque la ubicación de la jamba lateral de montaje agujeros con un lápiz. Retire la jamba lateral y proceder a perforar 1/8 " agujeros piloto de diámetro en los lugares marcados. Volver a colocar la jamba lateral en lugares previamente perforados, y comenzar a fijar el jamba lateral con los tornillos de seguridad de marcha atrás no previstas.

(Apriete los tornillos hasta que quede nivelado dentro de la cavidad del tubo.)

Paso 4. Diagrama Lado C

- Paso final: Coloque la jamba superior de cabecera a través de la parte superior de la puerta, dejando un mínimo de 1/8 " revelar entre la jamba de cabecera y la parte superior del marco de la puerta.
- Eliminar cabecera y proceder a perforar agujeros piloto de 1/8 "de diámetro en los lugares marcados.
- Volver a colocar en la cabecera superficie de montaje, y seguro con tornillos de seguridad no de marcha atrás previsto.

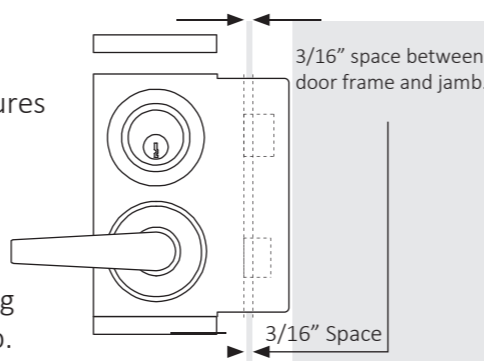
La instalación está completa.



La superficie de montaje

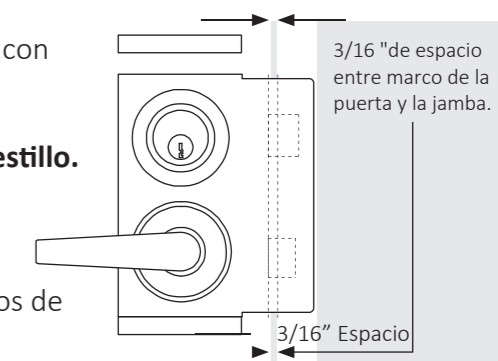
1/8" Brecha

1/8" Brecha



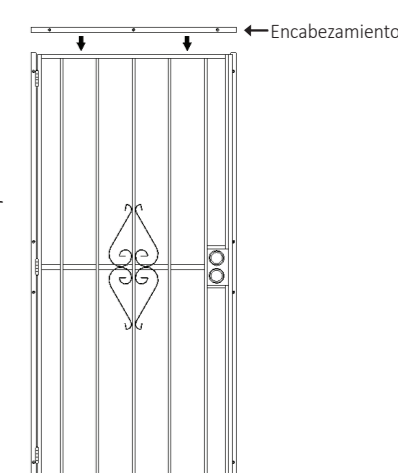
3/16" space between door frame and jamb.

3/16" Space



3/16" de espacio entre marco de la puerta y la jamba.

3/16" Espacio



Encabezamiento

Garantía limitada de por vida

Garantía de por vida que el marco soldado con autógena, piquetes y caja de la cerradura de una puerta de seguridad de Grisham está garantizado contra rotura para mientras usted es dueño de la casa en que se ha instalado la puerta de Grisham. Debe existir un defecto estructural o rotura de soldadura, Grisham reparará o reemplazará la puerta a nuestra discreción. Esta garantía no cubre daños causados por los vándalos, robos, o intentos de robos. componentes que prueban ser defectuosa en material o mano de obra están garantizados por un período de 1 año. (Excepto vidrio y pantalla).

Su puerta de seguridad de Grisham está garantizado contra defectos de pintura y óxido por un período de 1 año a partir de la fecha de compra. Óxido y pintura acabado de reclamaciones no pueden ser el resultado de abrasiones, abuso, mal uso, alteraciones o negligencia. "Grisham no asume ninguna otros gastos como los costos de mano de obra de cualquier tipo, piezas de recambio, reparaciones, o reinstallation"

Preguntas o reclamaciones de garantía. Por favor llame al 1-800-238-1005 7:00 a 4:30 pm CST. Gracias.



Product Guide

Interior and Exterior Doors (JPG013)



This guide contains procedures for common user serviceable repair tasks found on interior and exterior doors. If a condition arises that is not covered in this guide, please contact us for professional help. Interior and Exterior doors swing in or out on side hinges and may be single or double door configurations.

Do-It-Yourself

Technician



INTRODUCTION

Contact Us

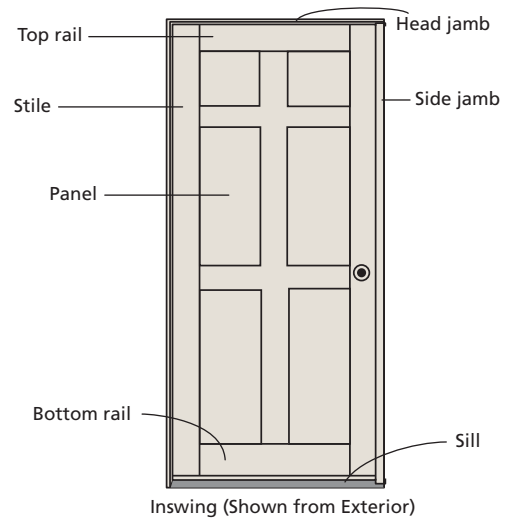
For questions, feel free to contact us by phone or email:

- Email: customerserviceagents@jeldwen.com
- Phone: (800)-JELD-WEN/(800)-535-3936

Table of Contents

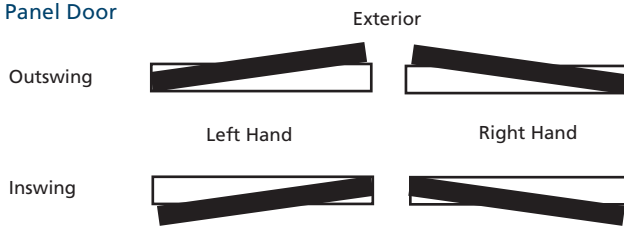
Precautions and Safety	2
Tools and Materials	2
Slab and Astragal Removal And Installation	2
Hardware Replacement and Adjustment	3
Weatherstrip Replacement	4
Glass Insert Replacement	5
Proper Door Installation	6
Troubleshooting Operational Problems	7
Glossary	9

Single Door Anatomy

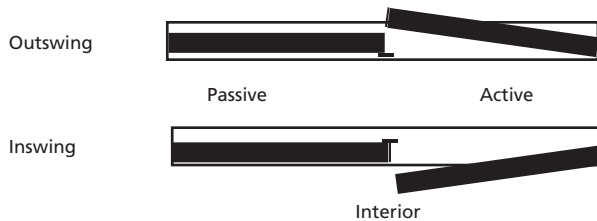


Handing (Shown from Top)

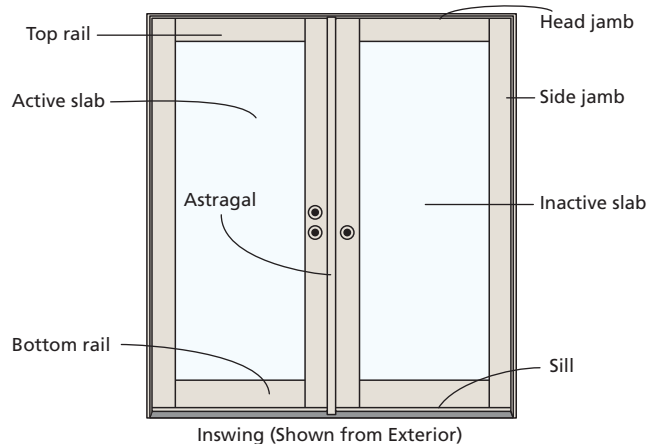
Single Panel Door



Double Panel Door



Double Door Anatomy



PRECAUTIONS AND SAFETY

- Follow all manufacturers' instructions and labels.
- Use proper and safe equipment and precautions when cleaning and servicing the exterior side of patio doors above ground level.
- Insect screens are not security devices and will not prevent a child, other person, or pet from falling through.
- Use sharp tools with care to avoid damage to wood surfaces.
- Use extra care when driving screws near glass unit to avoid breakage.
- Use caution when tightening screws to avoid stripping the screw holes.
- Slab removal can be awkward and could cause physical injury or product damage; we recommend the help of a second person.

TOOLS AND MATERIALS

Needed Tools

NOTE: Each tool is not required for every task.

- #2 Phillips head, square drive, and/or flat head screwdrivers
- Hammer
- Nail set/punch
- Tape measure
- Level
- Utility knife
- Putty knives
- Allen wrenches
- Power drill with bits
- Chisel
- Gloves
- Pliers/side cutters

Needed Materials

- String
- Tape
- Pencil & paper
- Scissors
- Brad nails
- Shims
- Replacement parts

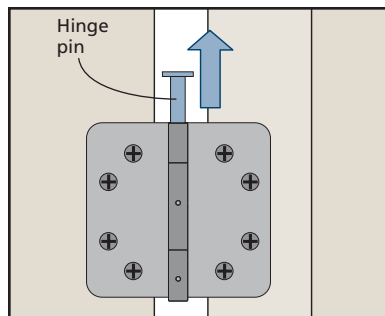
For Hardware Replacement:

- Wooden toothpicks or dowels
- Wood glue
- Wood putty
- Fine sandpaper
- Finishing supplies
- Silicone sealant

SLAB AND ASTRAGAL REMOVAL AND INSTALLATION

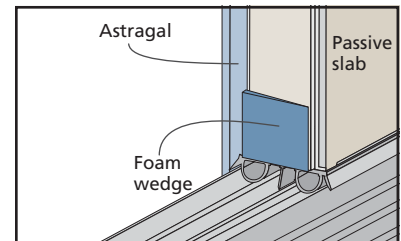
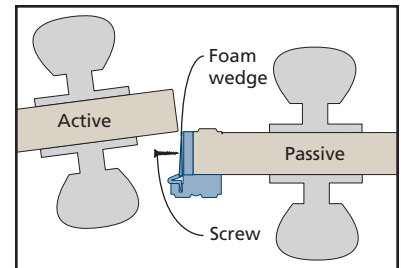
Because slab removal can be awkward and could cause physical injury or product damage, we recommend the help of additional people.

1. Open slab about half way and hold steady with the help of a second person.
2. Only inswing standard door hinges have removable hinge pins. With a small screwdriver or nail punch and hammer, drive hinge pin from bottom hinge, then working up to the top hinge. Doors with automatically closing hinges or outswing doors require removing the screws from one side of the hinge to remove the slab. Take extra precautions when removing the spring loaded automatically closing hinges.
3. Remove slab from frame.
4. To install slab, perform removal steps in reverse order.



Astragal Replacement

1. Open the active slab.
2. Remove the screws that attach the astragal.
3. If the astragal doesn't come off, there may be adhesive tape holding it in place. If so, carefully score the joint between the astragal and the slab.
4. Remove the astragal.
5. Fasten the new astragal through the pre-drilled holes in the same location as the old astragal.
6. Install a foam wedge on the passive slab at the bottom with the thick part against the leg of the astragal as shown.



HARDWARE REPLACEMENT AND ADJUSTMENT

Hardware Types

- Metal hardware offers functionality, aesthetic appeal and resistance to corrosion but is not totally corrosion proof.
- Plastic hardware offers high resistance to the elements however, over time it can deteriorate from ultraviolet light, heat, cold, and chemical exposure.
- Brass hardware has a special protective film to reduce/eliminate polishing and requires special care.
- See our complete Care and Maintenance document at www.jeld-wen.com for more information on cleaning and lubricating hardware.

Screw hole repair and hardware alignment, or realignment, are common tasks for any hardware replacement component. Follow these instructions if screw holes become stripped and/or if hardware no longer functions properly due to misalignment.

Screw Hole Repair (in wood only)

1. Cut wooden toothpicks or appropriate sized wood dowel to fit screw hole just below wood surface.
2. Fill screw hole with wood glue.
3. Insert toothpicks or dowel and let dry.
4. Fill to surface with wood putty and let dry.
5. Sand smooth and refinish and let dry.
6. Drill the new pilot hole.

Hardware Alignment (in wood only)

Misalignment can happen if screws have become stripped and cannot be tightened. This alignment will create new screw holes.

1. Remove hardware.
2. Repair screw holes according to the procedure above.
3. Mark new screw holes as follows:
 - Lay hardware in position and hold in place.
 - Mark new screw locations through screw holes.
 - Remove hardware and set aside.
4. Drill pilot holes with 1/16" drill bit at new marked screw hole positions no deeper than screw length.
5. Install hardware.
6. Test operation; if not operating properly, call us for assistance.

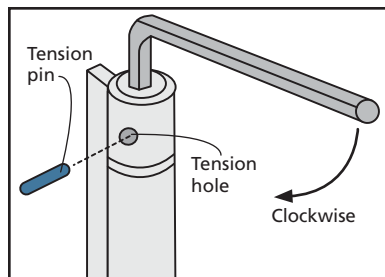
Hinge Replacement and Adjustment

Replacement

1. Remove slab.
2. Remove hinge plates from slab.
3. Repair screw holes as instructed above if stripped.
4. Install new hinge plates in the same locations.
5. Reinstall slab.

Adjustment (Spring Hinges Only)

1. Close door.
2. Insert the provided hex wrench so that it can be rotated clockwise.
3. Rotate hex wrench 1/4 turn and insert tension pin loosely into tension hole.
4. Remove hex wrench and try closing force.
5. Repeat steps until closing force is adequate but do not rotate past 3 holes on 180° openings or 4 holes on 90° openings.



Blinds Between the glass

For easiest operation, keep the slats in a fully open position while operating.

Adjustments

1. If the operator comes off of the track, hold the operator at a sharp angle to the glass and reinsert the two legs under the track opening.
2. Re-couple the operator magnets.

Re-couple Operator Magnets

1. Slide the operator past the half-way engagement point until the first click.
2. Full travel blinds will fully engage when you hear the first click. Half travel (those units with a single side operation) will require you to continue moving the operator up until you hear the second click. This will ensure the magnets are fully engaged.

MECHANISM REPLACEMENT

Raise and Lower Mechanism

1. Place a piece of cardboard between the slide mechanism and the glass to help release the magnets.
2. Tilt the mechanism toward you, and remove the mechanism. It may require a strong tug to break the magnetic bond.
3. Before replacing the new slide mechanism, ensure the glass is clean.
4. Insert the tabs underneath the lip of the inner frame and raise the slide to the top until the magnets engage.
 - a. Full travel blinds will fully engage when you hear the first click.
 - b. Half travel (those units with a single side operation) will require you to continue the travel of the operator up until you hear the second click. This will ensure the magnets are fully engaged.
5. Check for proper operation. Remove and reinstall if necessary.

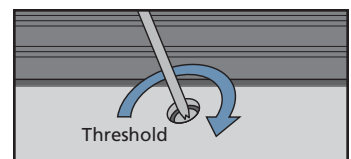
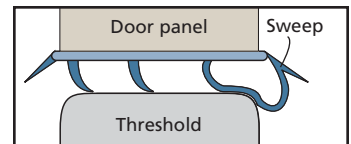
Tilt Mechanism

1. Move the top helix to the left side. Moving the slider magnet on the outside of the glass can do this. The helix tilt operator has a magnet set which will follow the magnet inside the slide mechanism.
2. Clean the glass attaching area.
3. Peel off the tape on the back of the slider.
4. Before application, push the magnet to the left of the slider. Ensure the slider is facing the right direction (there is a long horizontal gap at the top that allows the magnet housing to slide along the base).
5. Let the magnet be attracted to the left side of the magnet, which is inside the glass. Make sure the slide is horizontal.
6. Push the slide against the glass firmly on the tape area, as the adhesive works under pressure.

Threshold adjustment (adjustable thresholds only)

Note! Adjusting the threshold may break sealant joints at the ends and/or interfere with the foam wedges if installed. Adjust threshold, then replace these components as necessary. See "Foam Wedges" in the Weatherstrip Replacement section below for details.

Adjustable thresholds will have adjustment screw covers or exposed screws on the top where the door slab contacts the threshold when closed. Verify the sweep properly contacts the threshold with 1/8" compression as shown. If adjustment is needed, use a flat head screwdriver to remove screw covers. Turn all screws clockwise to adjust up; counterclockwise to move down until desired height is achieved and the threshold is level.



WEATHERSTRIP REPLACEMENT

Ordering New Weatherstrip

Weatherstrip gaskets and foam wedges are critical to water and air infiltration control. Check placement and quality of weatherstrip. Replace if damaged.

Fire-rated doors require specific weatherstrip. Please contact us if replacing weatherstrip in a fire-rated door.

Doors will have weatherstrip in the frame where the slab(s) are when normally closed. Some doors have a sweep attached to the bottom of the operating panel where it contacts the threshold. Double doors will have weatherstrip in the astragal.

1. Determine amount needed by measuring each piece to be replaced. Note the location on the door of each type of weatherstrip.
2. For each type of weatherstrip, add all measurements, then add an additional 10%.
3. Round up to the nearest foot.
4. Fill out the following table.

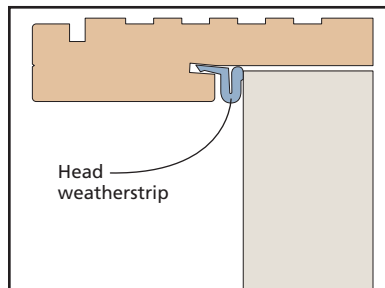
Information for Replacement Weatherstrip	
Product Identification	
Weatherstrip Location	
Weatherstrip Type	
Color	
Amount Needed	

5. Purchase new weatherstrip from a local supplier.

Frame/Threshold/Astragal/Mullion Weatherstrip

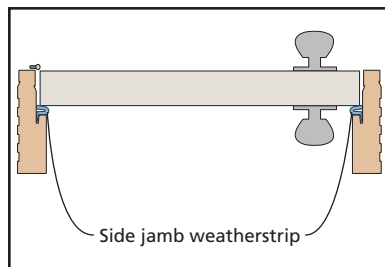
When replacing both the side and the head weatherstrip in the frame, install head weatherstrip first. Astragal weatherstrip runs vertically along the astragal (between the two slabs of double doors).

1. Open active panel.
2. Grip weatherstrip and gently pull out of kerf.

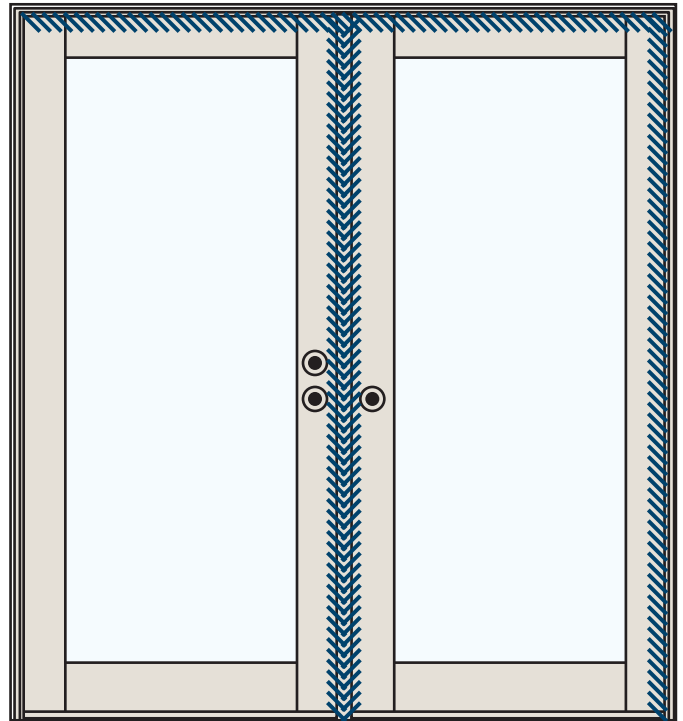


When replacing frame weatherstrip, if applicable, trim and overlap the new weatherstrip in the same way as the old weatherstrip.

1. Cut new weatherstrip to length.
2. Work the attachment barb into the kerf from one end to the other.



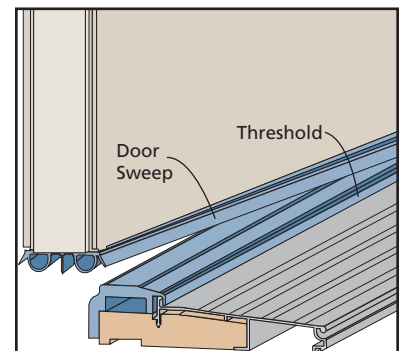
Possible Weatherstrip Locations on Double Doors



Door Sweep (Inswing Doors Only)

The door sweep is mounted on the bottom of the door slab and fills the gap between the threshold and the slab. Due to continual contact with the threshold, the door sweep may lose its shape and cease to provide an effective seal.

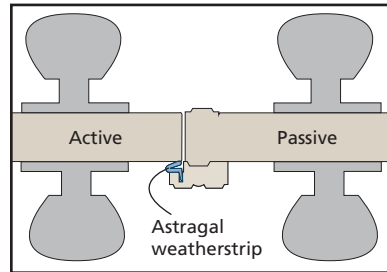
1. Remove slab.
2. Lay slab on flat padded work surface.
3. Remove staples in door sweep with needle nose pliers or side cutters.
4. Pull door sweep loose by starting at one end and working to the other.
5. Clean old sealant off rail with putty knife.
6. Trim new door sweep to same length as the existing one.
7. Cover face (the side with the barbs) of new door sweep with silicone sealant.
8. Work attachment barbs into kerfs from one end of the panel to the other.
9. Secure sweep to the door panel with staples and wipe off sealant squeeze-out. Seal the sweep on both ends with silicone sealant. Reinstall slab.



WEATHERSTRIP REPLACEMENT - CONTINUED

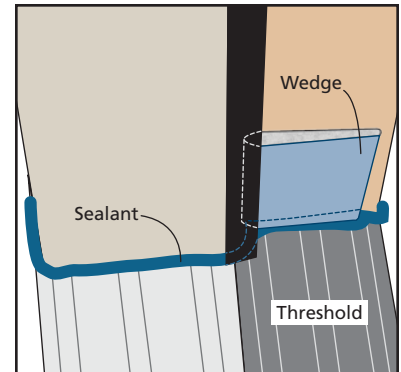
Astragal Weatherstrip

1. Open active door all the way.
2. Locate the accessible weatherstrip.
3. Grip weatherstrip and gently pull out of kerf.
4. Cut new weatherstrip to length.
5. Work the attachment barb into the kerf from one end to the other.



Foam Wedges

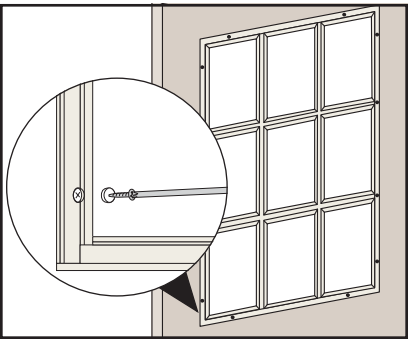
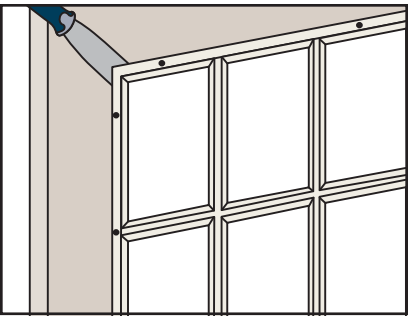
The foam wedges are used to complete the weatherstrip seal, at each bottom corner of the operating door slab(s). Doors are provided with one of two types of wedges. One has an up-turned L-shaped leg and the other doesn't (shown). Contact us for the appropriate replacement. For both types, the thin edge faces the edge of the door as it swings closed. Apply a bead of sealant (remove old sealant first if necessary) at the intersection of the jambs, brickmoulds, thresholds and floor as shown.



GLASS INSERT REPLACEMENT

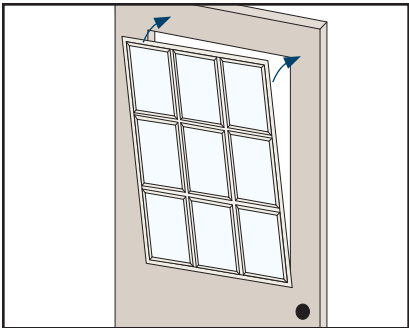
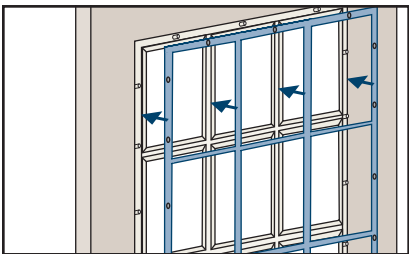
Remove Old Glass Insert

NOTE: Handling glass can be dangerous. Glass inserts can be heavy and awkward. Use additional help and always wear protective clothing.

1. If the old insert has screw plugs over the screw heads in the interior frame, drive a drywall screw into the screw plug until it is loose from the hole. Remove all remaining screw plugs in the same manner.
 
2. Support the glass insert while removing screws to keep it from falling. Remove the screws from the interior frame from the bottom up.
 
3. When all the screws are removed, slide the edge of a putty knife between a top corner of the interior frame and door. Work around the entire perimeter until the interior frame is loose.
4. Repeat this procedure around the exterior frame. Remove the glass insert and set aside in a safe location.
5. Clean both sides of the door where the new glass insert will contact the panel with a clean rag dampened with paint thinner. Remove all the old weatherstrip and then wipe again with a clean rag.

Install New Glass Insert

NOTE: The exterior frame is attached to the glass and does not have holes; the interior frame has screw holes.

1. Remove packaging materials from the new insert. If shipping screws are holding the unit together, separate the interior and exterior frames by loosening screws. Leave the screws in the interior frame and set aside. Additional screws are provided to complete assembly.
 
2. Place the lower portion of the exterior frame and glass on the lower edge of the door opening. Horizontally center the frame and glass into the opening and tilt up until the frame is flush against the door.
3. Position the interior frame in the opening using the press fit alignment pins located on the frame.
 
4. Secure the frame halves together by driving the screws through the interior frame and into the exterior frame with a Phillips head screwdriver until snug. Power drivers can be used on the lowest torque setting. Screws must then be checked with a hand screwdriver.
5. Finishing instructions are provided on the label attached to the door glass. Please read this **BEFORE** removing the label.
6. Insert the provided screw hole plugs over all exposed screw heads.
7. Clean glass with mild soap and water.

PROPER DOOR INSTALLATION

- Proper installation is essential for keeping doors operating smoothly. If a door fails to operate properly, an inspection is necessary to determine if it was installed correctly.
- A contractor or installer can assist in determining the cause of a door being "out of specification" and possibly correct it. Door problems due to improper installation are usually not covered by the manufacturer's warranty. For installation instructions, contact us or your supplier.
- The specifications and measurements referenced in this guide are taken from ASTM E2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights.

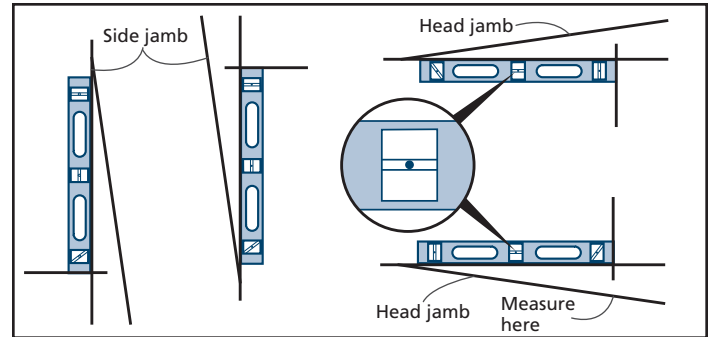
NOTE: These instructions do not address inspection for proper "water tightness" or flashing where the product integrates with the structure. A "water tight" inspection requires removal of the exterior siding and interior trim around the door. Seek professional assistance regarding this issue.

Level Indicator

Accurate measurements are essential in determining level and plumb. Most carpenters' levels have several bubble level indicators, making it possible to measure all parts of the door.

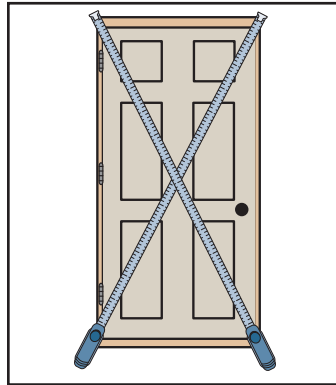
Examine the horizontal indicator. If the bubble is centered between the lines of the indicator, it is level.

If the bubble is not exactly centered, measure how far "out of level" or "out of plumb" by maneuvering the end of the level until the bubble is exactly centered. Measure the farthest gap between the level and the surface. On a 4' level (or longer), the gap must not exceed 1/4", or the surface is out of level/plumb.



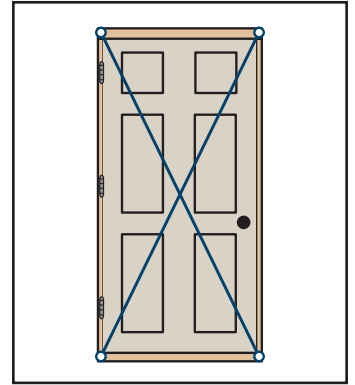
Square

Measure frame from top left to bottom right corner and from top right to bottom left corner. If measurements differ by 1/8", unit is out-of-square.



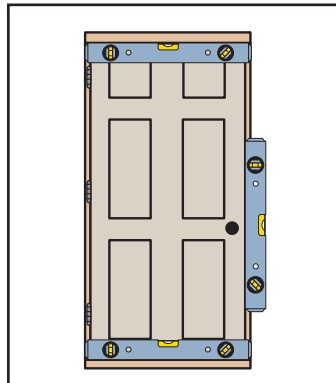
Frame Twists

Attach two pieces of string to frame, corner to corner. If there is a gap between strings at center point larger than 1/8", the frame is not flat. Repeat by switching strings and re-measuring.



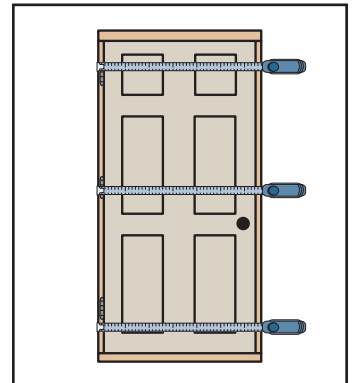
Level and Plumb

For plumb, place level against each side jamb or use a plumb bob. For level, place level against head jamb and sill.



Proper Shimming

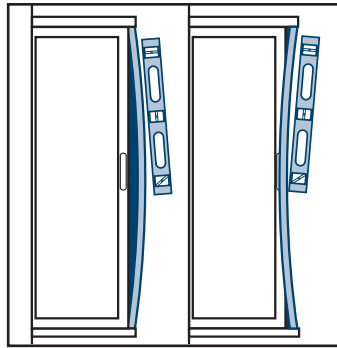
Measure width of frame at top, center, and bottom. If any two measurements differ more than 1/16", the frame is over or under shimmed. Repeat process and measure height of frame.



PROPER DOOR INSTALLATION - CONTINUED

Straight Side Jamb

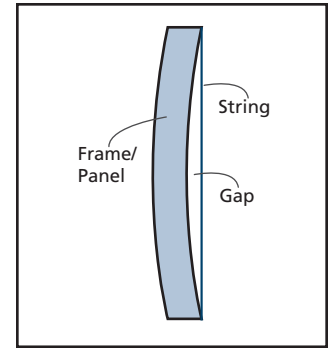
Place level against inside of side jamb. Look for gaps anywhere between level and side jamb. Repeat steps for other side jamb.



Frame/Panel Bow

Inspect interior and exterior frame jambs, or stiles/rails of slab (not glass) to determine if bowed.

1. Cut piece of string slightly longer than height of frame or slab.
2. Pull tightly and stretch string to upper and lower corners of jambs, or, stiles or rails of slab. Tape securely.
3. Look for gap between string and frame or slab. If gap measures more than 1/4" at any point, the slab is bowed.



TROUBLESHOOTING OPERATIONAL PROBLEMS

NOTE: Please check each possible cause, including verifying proper installation, before contacting us for assistance.

PROBLEM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
Door will not open	Knob locked	Make sure lock is in unlocked position, try again
	Obstructions	Remove obstructions/shipping blocks
	Slab damaged	Repair or replace slab
	Lockset damaged or broken	Replace lockset
	Strike plate loose or damaged	Tighten if loose, replace if damaged
	Improper installation	Inspect installation
Door will not close	Threshold dirty or damaged	Clean threshold then lubricate with silicone spray on cloth
	Deadbolt in locked position	Make sure lock latch is in unlocked position, try again
	Obstructions	Remove obstructions/debris/shipping blocks
	Strike plate loose or damaged	Tighten if loose, replace if damaged
	Lock strike plate misaligned	<ul style="list-style-type: none"> • Realign. Create new screw holes and chisel bore if necessary • Make shoot bolt lock strikes flush to sill (double doors)
	Weatherstrip loose or damaged	Reattach if loose, replace if damaged
	Frame bowed	Inspect Installation
	Improper installation	Inspect installation
Door swings open by itself	Slab not plumb	Inspect Installation
	Hinge plates not flush with frame or slab	Make hinge plates flush
	Hinge screws not flush with hinge plates	Ensure proper hinge placement; tighten screws
Uneven reveal (gap) between slab & frame	Slab(s) not aligned properly	<ul style="list-style-type: none"> • Adjust threshold if adjustable • Make hinge plates flush (hinged doors) • Ensure proper hinge placement (hinged doors)
	Improper installation	Inspect installation
Door stuck shut	Slab(s) misaligned	Remove obstructions/shipping blocks
	Slab painted to weatherstrip	Un-stick painted-over weatherstrip



TROUBLESHOOTING OPERATIONAL PROBLEMS - CONTINUED

PROBLEM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
Door will not lock	Lock misaligned	<ul style="list-style-type: none"> Align lock strikes Make shoot bolt lock strikes flush to sill (double doors)
	Improper installation	Inspect installation
Door squeaks	No lubricant on hinges	Lubricate all hinges with light oil
Light or air leaks through corners	Worn weatherstrip	Repair loose or damaged weatherstrip
	Foam wedge damaged or missing	Replace foam wedge
	Hinges may be worn or misaligned	Replace hinges. Ensure proper hinge placement
Door handle will not operate	Improper installation, damaged or misaligned	<ul style="list-style-type: none"> Check for damage/lubricate if necessary Check alignment of strike plate. Re-align if necessary
Shoot bolt will not fully engage	Lock strike obstructed or not deep enough to allow shoot bolt to fully engage	Clear any debris and verify shoot bolt lock strikes flush to sill
Water leaks through the door	Slab damaged or loose at hinges	Replace slab
	Weatherstrip damaged or missing	Reattach if loose, replace if damaged or missing
	Slab warped or bowed	Inspect installation
Moisture occurs between glass panes	Seal failure	Replace either the insulating glass assembly or the entire slab. This determination should be made by a service representative.
Glass surface fogs up	Condensation	<p>If condensation is on an interior surface:</p> <ul style="list-style-type: none"> Raise the average temperature of the house one or two degrees and do not block vents. Vent all appliances to the outdoors and run exhaust fans. Open patio door blinds for air circulation. Turn humidifiers down as the temperature gets colder (unless used for medical purposes). <p>If condensation is on an exterior surface:</p> <ul style="list-style-type: none"> Close patio door coverings to reduce cooling of the glass surface by air-conditioning. Remove or trim shrubbery close to patio doors to promote air circulation. <p>If condensation is between glass panes:</p> <ul style="list-style-type: none"> Seal failure. Replace either the insulating glass assembly or the entire slab. This determination should be made by a service representative.

GLOSSARY

Active Slab

Active slab(s) are any slab(s) on double door systems that operate and include locking hardware.

Astragal

The vertical trim attached to the inactive slab of a double door that bridges the gap between the slabs when closed and provides weather and overswing protection.

Boot-glaze

The method by which glass is set and sealed into a panel with a rubber-like beige or gray gasket ("boot").

Door Sweep

Weatherstrip that attaches to the bottom of a swinging patio door panel, providing a barrier against the elements.

Frame

The assembly of structural members (head, sill, and jambs) used to fasten the window/patio door to the structure.

Handing

The operating direction of an entry door; refers to the way the entry door will swing or slide to open (right-handed or left-handed).

Hinge

A jointed or flexible device on which a door or window turns.

Hinge Pin

A pin in the center of a hinge that holds the two parts together and allows them to pivot.

Jamb

The vertical frame members of a window or patio door assembly.

Kerf

A groove that often holds weatherstrip.

Keyway

The slot in the lock where the key is inserted.

Lock Jamb

The side jamb that houses the lock strike plate; the door slab closes into the lock jamb.

Passive Slab

The slab of a double door system that has the astragal mounted to it; the active slab locks into the passive slab.

Pilot Hole

A drilled hole that is no larger than the body of the screw (minus the threads).

Rail

The horizontal members of a door slab.

Reveal

The space between the slab and the frame.

Score

To inscribe a line with a sharp instrument.

Shoot Bolt

A locking component which, when activated, extends vertically from the end of an inactive slab and engages a strike plate in the head and sill of the frame.

Slab

An assembly comprised of stiles (vertical pieces), rails (horizontal pieces) that is installed into a frame.

Stile

The vertical members of a door slab.

Strike Plate

A bracket fixed to the frame utilized as a latching point for locking systems.

Weatherstrip

A strip of flexible material that fills the joint between the door slab and the frame and is used to prevent rain, snow, and air from entering.

The repair tasks offered herein can be accomplished by a homeowner with some mechanical aptitude. If you are unsure, it is recommended that you hire a trained service provider such as a competent and licensed construction contractor or building professional. JELD-WEN disclaims any and all liability associated with the use and/or provision of these instructions. Any reliance upon the information or advice is at the risk of the party so relying. The information contained herein may be changed from time to time without notification.

GAF

Residential Reference Guide

The one-stop guide from North America's Largest Roofing Manufacturer



GAF shingles and roof accessories are made to work together. They provide a system that's built to protect homes—so the people who live inside them can enjoy what matters most.

GAF









We protect what matters most™

	LRS	Pages
Technology Index		3
GAF Lifetime [†] Roofing System LRS		4-5
GAF Shingles		6-19
Timberline[®] Lifetime[†] Shingles Collection LRS		
Timberline [®] HDZ™	●	8
Timberline [®] UHD	●	9
Timberline [®] NS	●	10
Timberline [®] AH	●	11
Timberline [®] CS	●	11
Lifetime[†] Designer Shingles[®] Collection LRS		
Grand Canyon [®]	●	13
Camelot [®] II	●	14
Grand Sequoia [®]	●	14
Woodland [®]	●	15
Slateline [®]	●	15
SBS Modified IR Shingles Collection LRS		
Timberline [®] AS II	●	16-17
Grand Sequoia [®] AS	●	16-17
3-Tab Shingle Collection (Excluded from LRS)		
Royal Sovereign [®]		18-19
Shingle Specifications Chart		20-21
GAF Roofing Accessories LRS		
Leak Barriers	●	23
Roof Deck Protection	●	24
Starter Strip Shingles	●	25
Cobra [®] Attic Ventilation	●	26
Ridge Cap Shingles	●	27
Other Products		
Master Flow [®] Ventilation Products		28
WeatherSide™ Fiber-Cement Siding		29
ThermaCal [®] Building Envelope Insulation Panels		30
LIBERTY™ Self-Adhering Roofing System		31



Trust the diamonds

Whether it's warranty coverage that gives homeowners peace of mind or technology that makes their roof look and perform its best, there's a GAF diamond badge behind it.

	Install any GAF Lifetime Shingle and get a Lifetime[†] Limited Warranty on your qualifying shingle. Install any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories, and get a Lifetime[†] Limited Warranty on your qualifying GAF products.
	GAF Advanced Protection[®] Shingle Technology uses highly advanced design and manufacturing techniques to produce cutting-edge roofing products.
	Dura Grip™ Adhesive helps protect your roof investment from winds and wind-driven rain.
	StainGuard Plus™ Algae Protection¹ featuring Time-Release Technology is a 25-year limited warranty against blue-green algae discoloration.
	StainGuard[®] Algae Protection² is a 10-year limited warranty against blue-green algae discoloration.
	LayerLock™ Technology is a proprietary technology which mechanically fuses the common bond between overlapping shingle layers.
	WindProven™ Limited Wind Warranty³ is a 15-year limited wind warranty with no maximum wind speed limitation — available when you install the LayerLock™-labeled Shingles as well as GAF starter strips, roof deck protection, ridge cap shingles, and leak barrier or attic ventilation.
	25-Year Limited Warranty Term⁴ gives homeowners protection they can trust.

¹ Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence (or eligible second owner(s)) owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. For Lifetime coverage on shingles only see *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. For Lifetime coverage on shingles and accessories see *GAF Roofing System Limited Warranty* for complete coverage and restrictions. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*. Visit gaf.com/LRS for qualifying GAF products.

² StainGuard Plus™ Time-Release Technology is available only on Shingles sold in packages bearing the StainGuard Plus™ logo. Products with StainGuard Plus™ Time-Release Technology are covered by a 25-year limited warranty against blue-green algae discoloration. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.

³ StainGuard[®] algae protection is available only on shingles sold in packages bearing the StainGuard[®] logo. Products with StainGuard[®] algae protection are covered by a 10-year limited warranty against blue-green algae discoloration. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.

⁴ For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle and Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products.

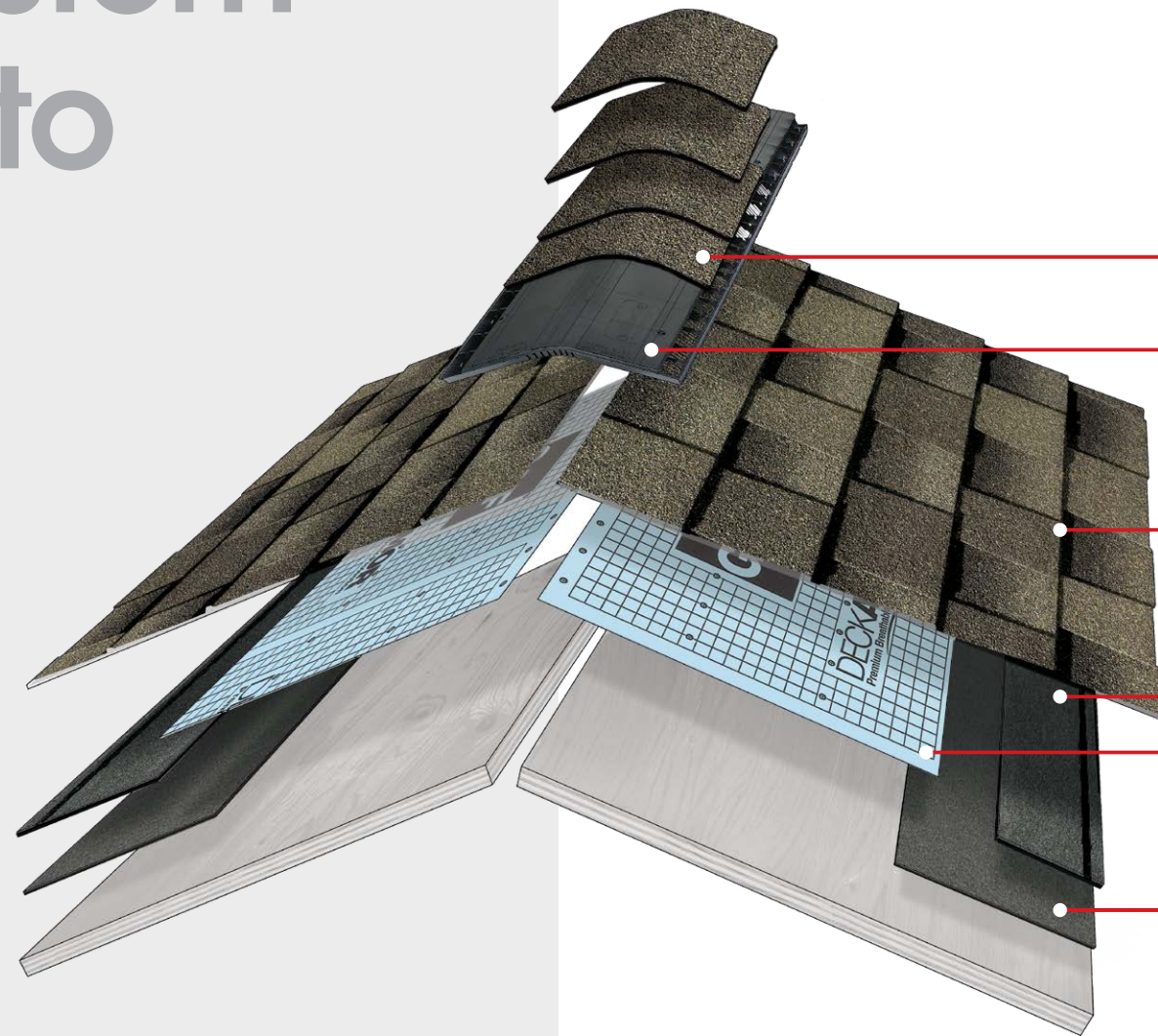
⁵ See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.







Trust the system that's built to protect

A roof is so much more than shingles. It's layers of protection, working together to help keep your home safe from wind, rain, snow, and even sun.

Install any GAF Lifetime[†] Shingle and at least 3 qualifying GAF Accessories and get a Lifetime[†] limited warranty on your qualifying GAF products plus non-prorated coverage for the first 10 years. For even stronger coverage, ask your GAF factory-certified contractor¹ about enhanced GAF warranties.

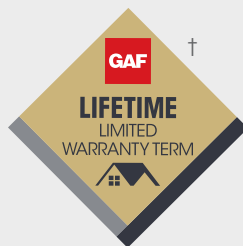
Visit gaf.com/LRS for a list of qualifying GAF products.



- Ridge Cap Shingles 
- Cobra[®] Attic Ventilation 
- Lifetime[†] Shingles 
- Starter Strip Shingles 
- Roof Deck Protection 
- Leak Barrier 



Visit gaf.com/Lifetime



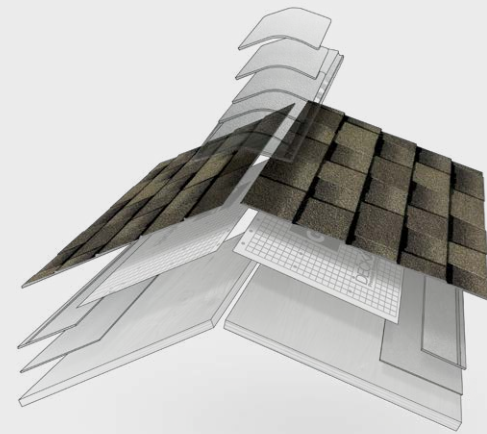
[†]Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*.























¹Contractors enrolled in GAF certification programs are not employees or agents of GAF, and GAF does not control or otherwise supervise these independent businesses. Contractors may receive benefits, such as loyalty rewards points and discounts on marketing tools from GAF for participating in the program and offering GAF enhanced warranties, which require the use of a minimum amount of GAF products.



Timberline® Lifetime[†] Shingles Collection

More homeowners in North America rely on Timberline® Shingles than any other brand. They offer just the right combination of beauty, performance, and reliability.



<p>Timberline® HDZ™ pg 7-8</p> 	   	<p>America's #1-selling shingle—now featuring the industry's widest nail zone</p>
<p>Timberline® UHD pg 7 & 9</p> 	 	<p>For a thick ultra-dimensional wood-shake look in an asphalt shingle</p>
<p>Timberline® NS pg 10</p> 	 	<p>The beauty of natural wood shakes in an asphalt shingle</p>
<p>Timberline® AH pg 11</p> 	   	<p>The striking hues of America's heartland</p>
<p>Timberline® CS pg 11</p> 	    	<p>Our most reflective shingle</p>

For specifications see pages 20-21



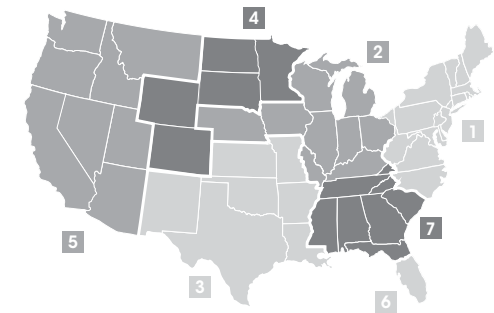
For the full collection visit gaf.com/timberline



Availability

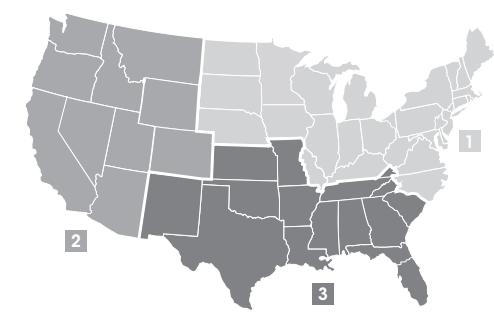
Timberline® HDZ™

	1	2	3	4	5	6	7
Most Popular Colors:							
Barkwood	•	•	•	•	•	•	•
Charcoal	•	•	•	•	•	•	•
Hickory	•	•	•	•	•	•	•
Hunter Green	•	•	•	•	•	•	•
Mission Brown	•	•	•	•	•	•	•
Pewter Gray	•	•	•	•	•	•	•
Shakewood	•	•	•	•	•	•	•
Slate	•	•	•	•	•	•	•
Weathered Wood	•	•	•	•	•	•	•
Regional Colors:							
Biscayne Blue	•						
Birchwood ²		•		•	•	•	•
Copper Canyon ²					•		
Driftwood						•	•
Fox Hollow Gray	•	•					
Golden Amber ^{1,2}					•		
Oyster Gray	•					•	•
Patriot Red	•						
Sunset Brick						•	
White ²						•	
Williamsburg Slate	•	•					



Timberline® UHD

	1	2	3
Most Popular Colors:			
Barkwood	• ³	•	•
Charcoal	• ³	•	•
Pewter Gray	• ³		• ¹
Shakewood	• ³	•	• ¹
Slate	• ³	•	• ¹
Weathered Wood	• ³	•	•



¹Limited availability.

²Rated by the Cool Roof Rating Council (CRRCC) and can be used to comply with 2019 Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations.

³Timberline® UHD Shingles in these areas have the Dual Shadow Line feature.

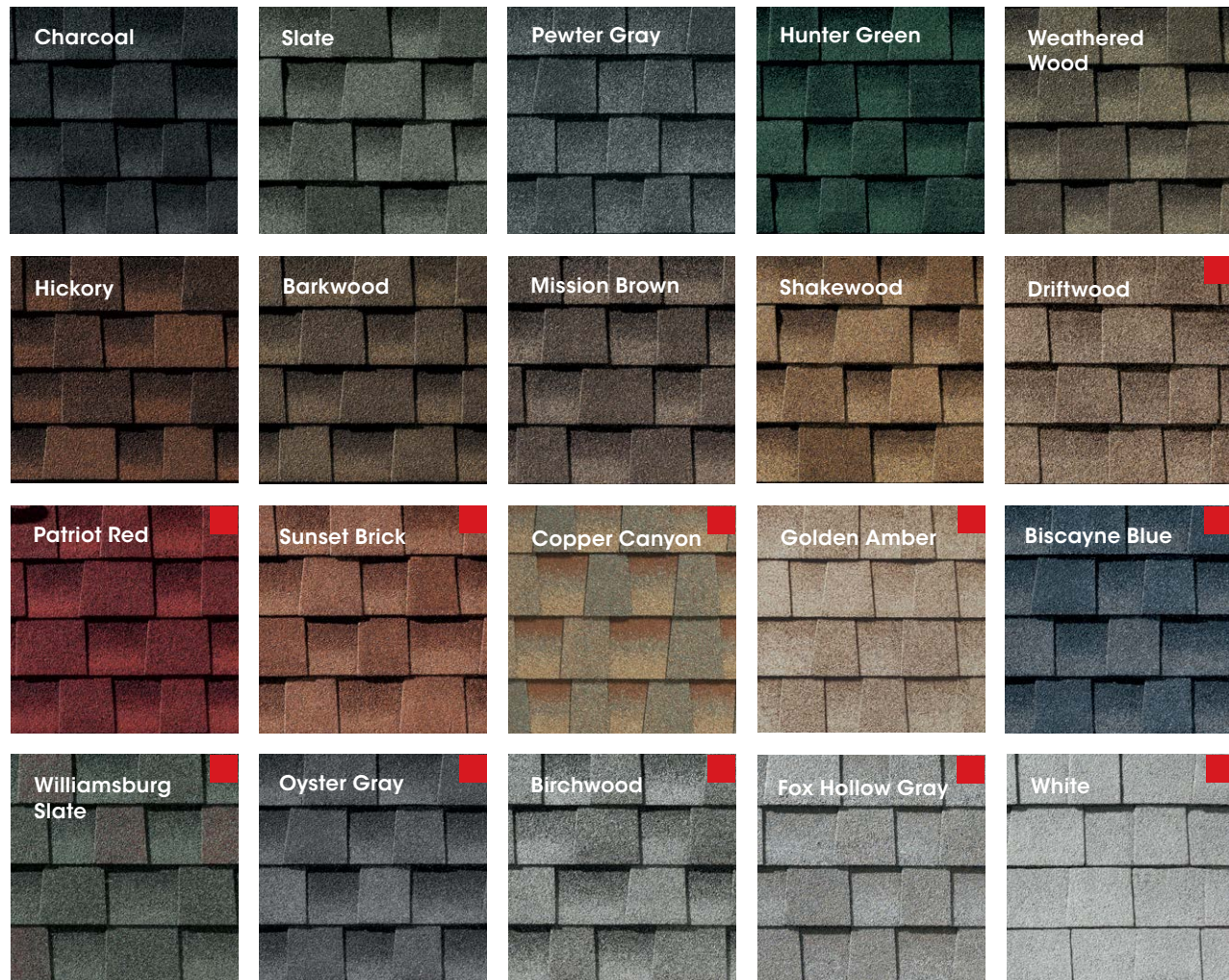


GAF Timberline[®] HDZ[™]

High Definition[®] Lifetime[†] Shingles



Timberline[®] shingles protect millions of families nationwide with great value and a genuine wood-shake look. Peace of mind has never looked so good.



For more details visit gaf.com/hdz

[†] 15-year WindProven[™] limited wind warranty on Timberline[®] HDZ[™] Shingles requires the use of GAF starter strips, roof deck protection, ridge cap shingles, and leak barrier or attic ventilation. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products.

NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

Available regionally

GAF Timberline[®] UHD

Ultra High Definition[®] Lifetime[†] Shingles

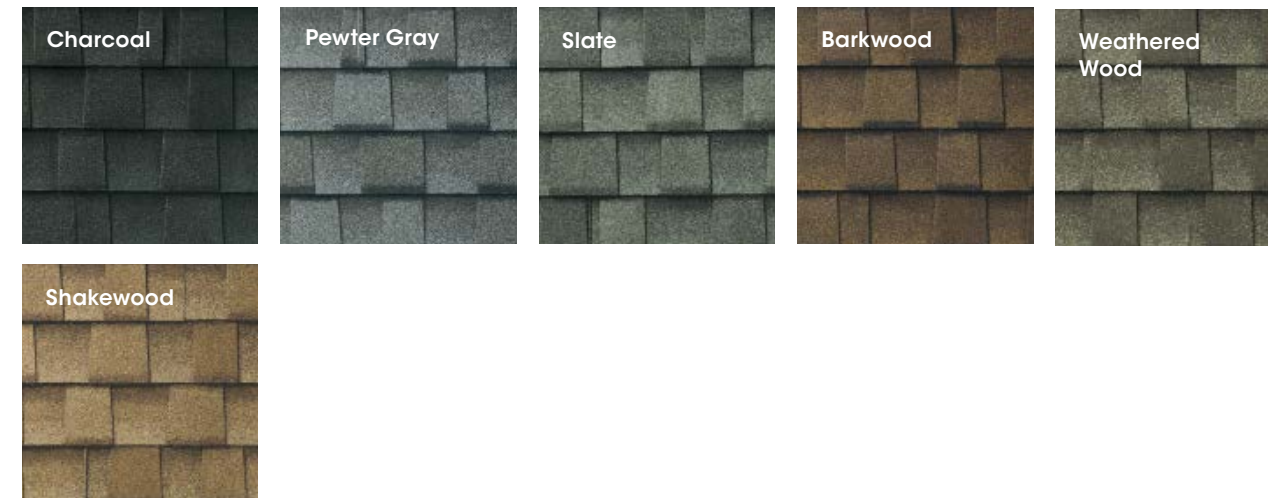


Proprietary color blends and enhanced shadow effects create eye-catching dimensionality on a thick shingle while StainGuard Plus[™] Time-Release Technology helps prevent blue-green algae stains



For more details visit gaf.com/uhd

Dual Shadow Lines add enhanced dimensionality and take your home's roof—and curb appeal—to new heights. The impact is unmistakable¹



For more details visit gaf.com/dualshadow

¹ Timberline[®] UHD Shingles with the Dual Shadow Line feature are only available in certain areas; see chart on page 7 for regional availability

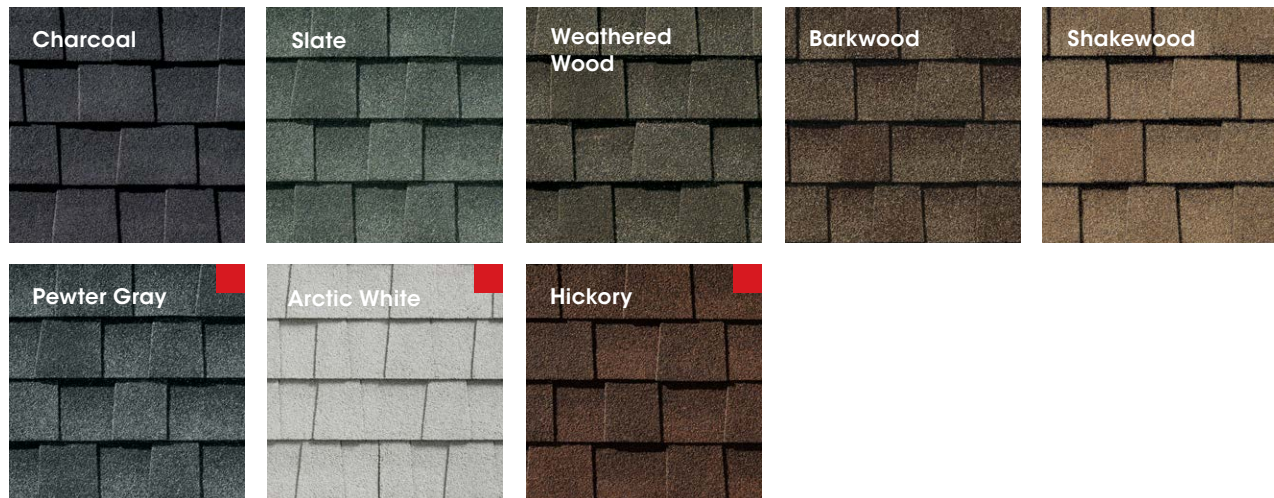
NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.



GAF Timberline[®] NS

Natural Shadow[®] Lifetime[†] Shingles

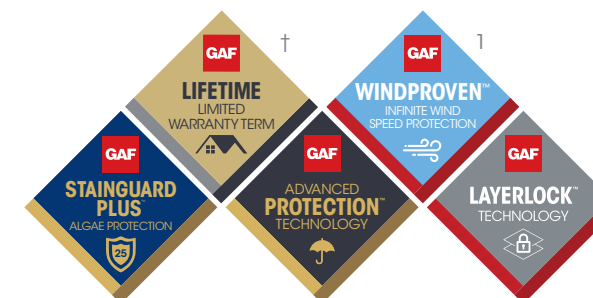
These stylish yet practically priced architectural shingles provide value and performance with a classic shadow effect for a subtle, even-toned look



GAF Timberline[®] AH

American Harvest[®] Lifetime[†] Shingles

Advanced color techniques deliver extra dimensions that add sophistication and charm to any home



For more details visit gaf.com/ah

Timberline[®] Shingles LRS

Timberline[®] Shingles LRS

GAF Timberline[®] CS

Cool Series[®] Lifetime[†] Shingles

Highly reflective shingles that can help to reduce temperatures in your attic, and help save on air-conditioning costs²



For more details visit gaf.com/cs

For more details visit gaf.com/ns

10 NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

Available regionally

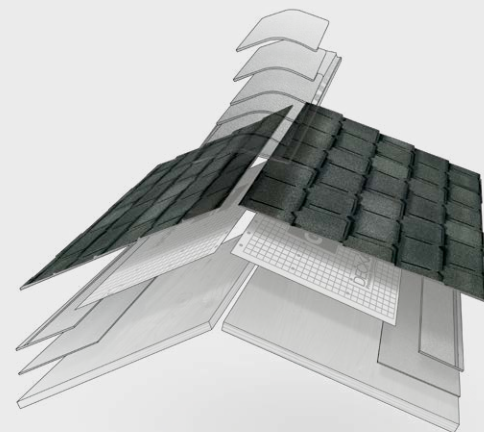
¹ 15-year WindProven™ limited wind warranty on GAF Shingles with LayerLock™ Technology requires the use of GAF starter strips, roof deck protection, ridge cap shingles, and leak barrier or attic ventilation. See GAF Roofing System Limited Warranty for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products.

² Energy cost savings are not guaranteed and the amount of savings may vary based on climate zone, utility rates, radiative properties of roofing products, insulation levels, HVAC equipment efficiency, and other factors. NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.



Lifetime[†] Designer Shingles Collection

Sophisticated designs, custom color palettes, and high performance, GAF Lifetime Designer Shingles are only a fraction of the cost of traditional slate or wood shakes



Designer Lifetime Shingles

Grand Canyon[®] pg 13	 	Rugged sophistication with striking depth
Camelot II[®] pg 14	 	Contemporary slate-inspired elegance in an asphalt shingle
Grand Sequoia[®] pg 14	 	Rustic charm meets 21st-century style
Woodland[®] pg 15	 	The beauty of natural wood shakes in an asphalt shingle
Slateline[®] pg 15	 	An asphalt shingle with the dramatic look of slate

For specifications see pages 20-21

GAF GrandCanyon[®] Designer Lifetime[†] Shingles

The ultimate choice for a rugged wood-shake look, offering incredible depth and dimension



For more details visit gaf.com/grandcanyon



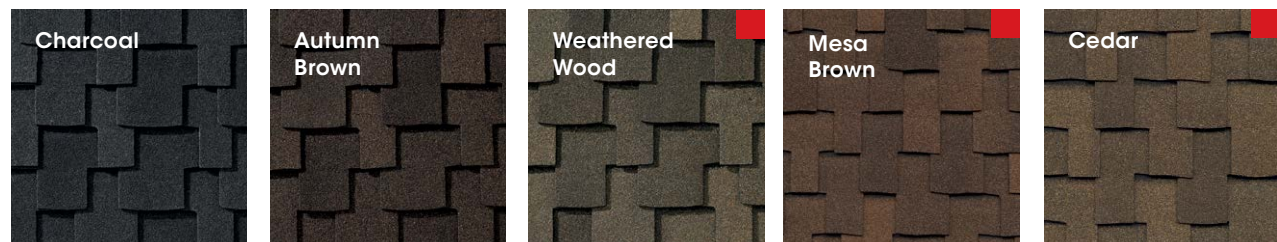
For the full collection visit gaf.com/designer





GAF GrandSequoia® Designer Lifetime[†] Shingles

Artisan-crafted shapes combined with oversized tabs result in a sophisticated beauty unmatched by typical shingles



For more details visit gaf.com/grandsequoia

GAF Woodland® Designer Lifetime[†] Shingles

The stylish look of hand-cut European shingles at an incredibly affordable price



For more details visit gaf.com/woodland

GAF Camelot® II Designer Lifetime[†] Shingles

Designed to complement your home's exterior color scheme, these shingles give your home the luxury look you want without breaking your budget



For more details visit gaf.com/camelotII

GAF Slateline® Designer Lifetime[†] Shingles

Bold shadow lines and tapered cut-outs create the look of slate at a fraction of the cost

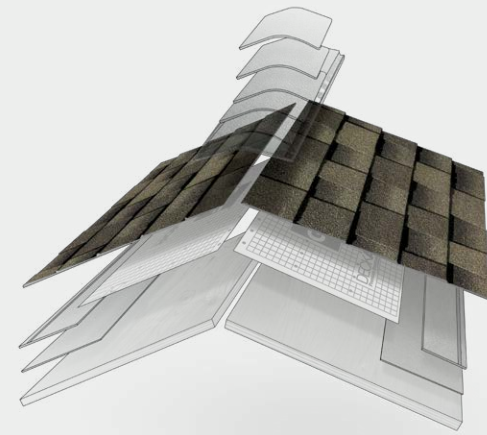


For more details visit gaf.com/slateline



SBS Modified Impact Resistance (IR) Shingles Collection

SBS modified asphalt formula results in rubber-like flexibility and increased impact resistance



<p>Timberline® AS II</p> <p>pg 17</p>		<p>UL2218 Class 4 impact resistance to help protect your most valuable asset</p>
<p>Grand Sequoia® AS</p> <p>pg 17</p>		<p>The look of rugged wood shakes in an asphalt shingle with UL2218 Class 4 impact resistance</p>

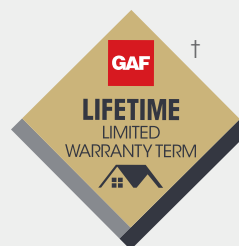
For specifications see pages 20-21

UL 2218 Class 4 Impact-Resistance Test

A 2" steel ball is dropped twice from a 20' height onto various target locations to evaluate the shingles' ability to withstand the impact.

<p>✘ Fail</p>	<p>✔ Pass</p>
<p>Result on a standard shingle Evidence of visible ruptures or cracks through the shingle immediately after impact</p>	<p>Results on a Class 4 shingle No evidence of ruptures or cracks through the shingle immediately after impact</p>

For the full collection visit gaf.com/armorshield



GAF Timberline® AS II

ArmorShield® II SBS-Modified IR Shingles

Crafted with the finest attention to detail, this striking shingle captures the essence of wood in a thick, triple-layer asphalt design



For more details visit gaf.com/as

GAF Grand Sequoia® AS

ArmorShield® SBS-Modified IR Shingles

The ultimate choice for a rugged wood-shake look, offering incredible depth and dimension



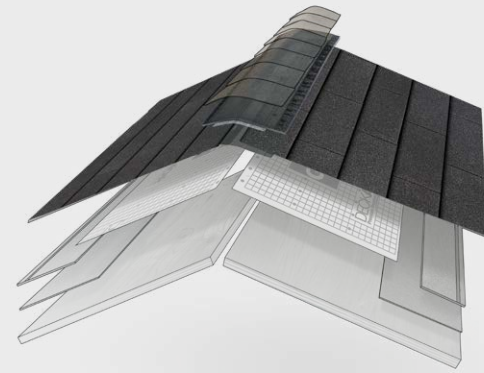
For more details visit gaf.com/grandsequoiaAS

NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.



3-Tab Shingles

The perfect choice for first-time buyers, these shingles add beauty and performance to any roof

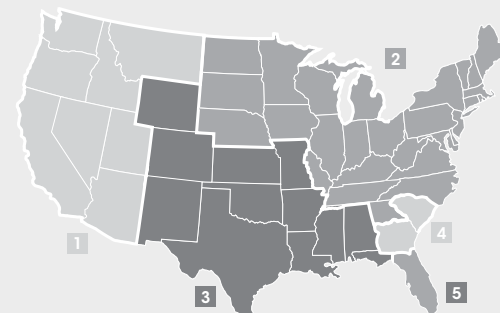


<p>Royal Sovereign® pg 18-19</p>		 	<p>Excellent performance and a vivid design make for an exceptional investment</p>
---	---	--	--

For specifications see pages 20-21

Color Availability

Royal Sovereign®	1	2	3	4	5
Autumn Brown		•	•	•	•
Charcoal	•	•	•	•	•
Golden Cedar		•	•	•	•
Silver Lining		•	•	•	•
Weathered Gray		•	•	•	•
White ¹	•	•			•
Ash Brown			•		
Nickel Gray		•			
Slate		•	•	•	



¹ Royal Sovereign® White can be used to comply with 2019 Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations; is rated by the Cool Roof Rating Council (CRRC); and meets Green Building Standards Code of Los Angeles County for residential buildings.



For the full collection visit gaf.com/3Tab



GAF Royal Sovereign® 3-Tab Shingles

Beautiful. Reliable. Affordable.



3-Tab Shingles (Excluded from LRS)

3-Tab Shingles (Excluded from LRS)



Shingle Specifications

Shingle	Warranty	Technology	Shingle Construction	Approximate Physical Attributes					Codes										Special Features																
				Pieces/Square	Bundles/Square	Nails/Square ⁵	Exposure	Dimensions	Fire	Wind	National			Regional				Passes UL 2218, Class 4 Impact Test	Cool Roof Rating Council (CRRC) Rated																
Timberline® Lifetime¹ Shingles Collection																																			
Timberline® HDZ™					64	3	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7	●	●	●	●	●	●	●	8										
Timberline® UHD					64	4	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7,10	●	●	●	●	●	●	●											
Timberline® AH					64	3	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7	●	●	●	●	●	●	●	●										
Timberline® NS					64	3	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7	●	●	●	●	●	●	●	9										
Timberline® CS					64	3	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7	●	●	●	●	●	●	●	●										
Lifetime¹ Designer Shingles Collection																																			
Grand Canyon®					72	6	360	5" (127 mm)	17" x 40" (432 x 1,016 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Grand Sequoia®					70	5	360	5" (127 mm)	17" x 40" (432 x 1,016 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Woodland®					56	4	280	6 1/2" (165 mm)	17" x 40" (432 x 1,016 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Camelot® II					56	4	280	7 1/2" (191 mm)	17" x 34 1/2" (432 x 876 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Slateline®					48	3	288	7 1/2" (191 mm)	17" x 40" (432 x 1,016 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
SBS Modified IR Shingles Collection																																			
Timberline® AS II					64	3	256	5 5/8" (143 mm)	13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Grand Sequoia® AS					72	4	360	5" (127 mm)	17" x 40" (432 x 1,016 mm)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
3-Tab Shingle																																			
Royal Sovereign®					English 79 Metric 64	3	English 316 Metric 256	English 5" (127 mm) Metric 5 5/8" (143 mm)	English 12" x 36" (305 x 914 mm) Metric 13 1/4" x 39 3/8" (337 x 1,000 mm)	●	●	●	●	●	●	●	7	7	●	●	●	●	●	●	7										

¹ Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*.

² See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.
³ 15-year WindProven™ limited wind warranty on GAF Shingles with LayerLock™ Technology requires the use of GAF Starter Strips, Roof Deck Protection, Ridge Cap Shingles, and Leak Barrier or Attic Ventilation. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. For installations not eligible for the WindProven™ limited wind warranty, see *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.

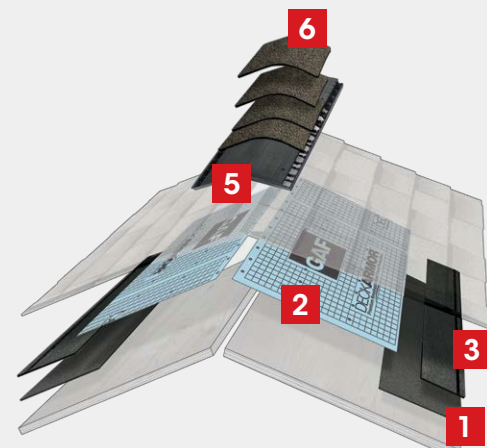
⁵ Steeper slopes and maximum wind warranties may require more nails.
⁶ StainGuard® algae protection is available only on shingles sold in packages bearing the StainGuard® logo. Products with StainGuard® algae protection are covered by a 10-year limited warranty against blue-green algae discoloration. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.
⁷ Applies to some plants (that make referenced product).
⁸ Applies to White only.
⁹ Applies to Arctic White only.
¹⁰ Formerly known as Timberline Ultra HD®.

⁴ StainGuard Plus™ Time-Release Technology is available only on shingles sold in packages bearing the StainGuard Plus™ Time-Release Technology logo. Products with StainGuard Plus™ Time-Release Technology are covered by a 25-year limited warranty against blue-green algae discoloration. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.
⁶ Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture.
⁷ Applies to some plants (that make referenced product).
⁸ Applies to White only.
⁹ Applies to Arctic White only.
¹⁰ Formerly known as Timberline Ultra HD®.



Roofing Accessories

Install any GAF Lifetime[†] Shingle and at least 3 qualifying GAF Accessories and you'll get a Lifetime limited warranty on your qualifying GAF products.



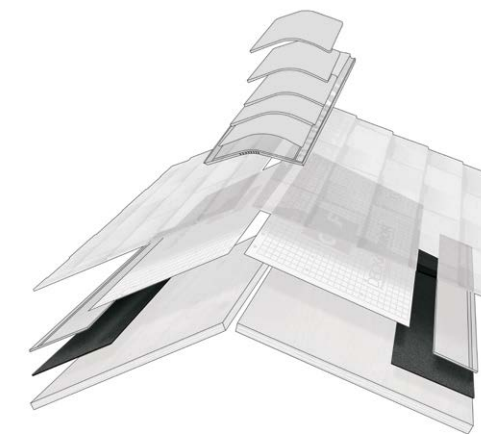
Visit gaf.com/LRS for a list of qualifying products.

Leak Barriers pg 23		Help prevent leaks caused by wind-driven rain and ice dams
Roof Deck Protection pg 24		Helps shield the roof deck from moisture infiltration
Starter Strip Shingles pg 25		Help guard against shingle blow-offs at the eaves and rakes
Cobra[®] Attic Ventilation pg 26		Helps reduce attic moisture and heat
Ridge Cap Shingles pg 27		The finishing touch that helps defend against leaks at the hips and ridges

[†] Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying products. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*.

Leak Barriers

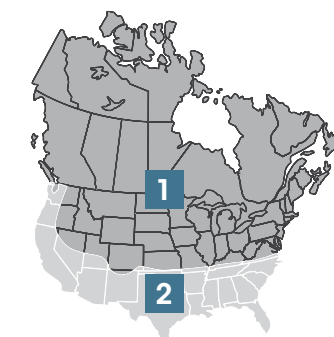
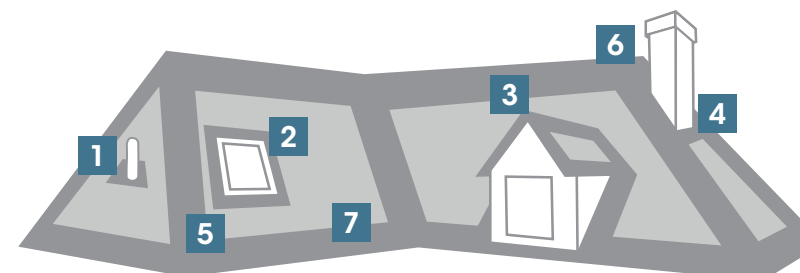
Help prevent leaks caused by wind-driven rain and ice dams



StormGuard[®]		<ul style="list-style-type: none"> Film-surfaced peel and stick underlayment for asphalt shingles and metal roofing Self-seals fasteners and helps protect vulnerable areas of the roof 250F high-temperature design. Meets or exceeds the performance criteria of ASTM D1970 2 Sq. (200 ft² [18.58 m²]) roll size - excludes laps
WeatherWatch[®]		<ul style="list-style-type: none"> Mineral-surfaced peel and stick underlayment for asphalt shingles Self-seals fasteners and helps protect vulnerable areas of the roof Meets or exceeds the performance criteria of ASTM D1970 2 Sq. (200 ft² [18.58 m²]) & 1.5 Sq. (150 ft² [13.94 m²]) roll sizes - excludes laps

Leak Barrier Application Recommendations:

Strongly recommended around	Optional around	Required by code at ¹	Region ¹
1. Penetrations 2. Skylights 3. Valleys & dormers 4. Flashings & transitions	5. Hips & rake edges 6. Ridges	7. Eaves in colder zones <i>Recommended in warmer zones</i>	1. Colder zone 2. Warmer zone



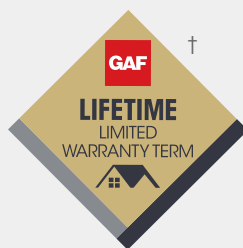
¹ Always check local building codes for requirements in your area.

² To qualify for this coverage, must be installed with GAF Lifetime Shingles and at least 3 qualifying GAF Accessories. See [GAF.com/LRS](http://gaf.com/LRS) for qualifying products and see *GAF Roofing System Limited Warranty* for complete coverage and restrictions.

For the full collection visit gaf.com/leakbarriers

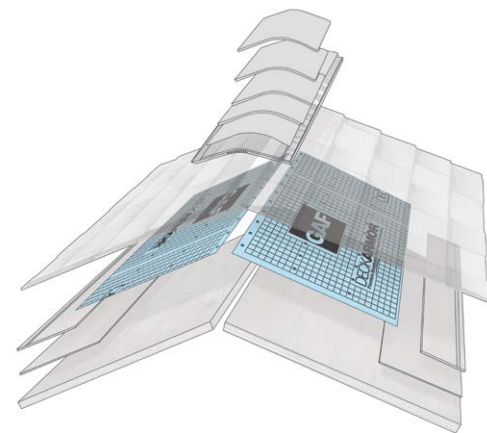


For the full collection visit gaf.com/system



Roof Deck Protection

Helps shield the roof deck from moisture infiltration



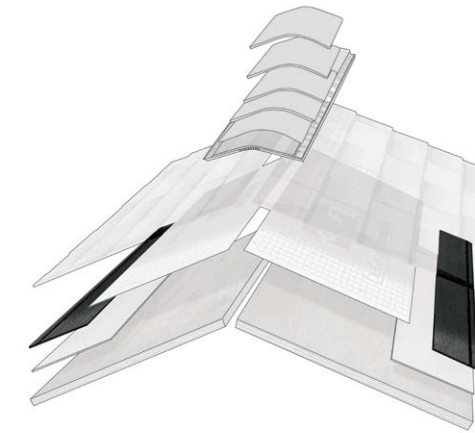
<p>DeckArmor™</p>		<ul style="list-style-type: none"> ▪ Premium breathable synthetic underlayment for asphalt shingles and other roof systems ▪ Nom. 16 perms, high-traction surface helps resist tears ▪ 48" x 250' (1.22 m x 76.2 m); 10 Sq. (1,000 ft² [92.9 m²]) roll size - excludes laps
<p>Tiger Paw™</p>		<ul style="list-style-type: none"> ▪ Premium synthetic underlayment for asphalt shingles and other roof systems ▪ High-traction surface helps resist tears, and deck side coating provides moisture control ▪ 48" x 250' (1.22 m x 76.2 m); 10 Sq. (1,000 ft² [92.9 m²]) roll size - excludes laps
<p>FeltBuster®</p>		<ul style="list-style-type: none"> ▪ High-traction synthetic underlayment for asphalt shingles ▪ Value-priced, high-traction surface helps resist tearing ▪ 48" x 250' (1.22 m x 76.2 m); 10 Sq. (1,000 ft² [92.9 m²]) roll size - excludes laps
<p>Shingle-Mate™</p>		<ul style="list-style-type: none"> ▪ Fiberglass-reinforced underlayment for asphalt shingles ▪ Fiberglass reinforcement lays flat and helps prevent telegraphing through shingles ▪ 36" x 144' (.914 m x 43.89 m); 4 Sq. (432 ft² [40.13 m²]) roll size - excludes laps
<p>Specialty Underlayment</p>		
<p>VersaShield®</p>		<ul style="list-style-type: none"> ▪ Fiberglass-reinforced fire-resistant underlayment for asphalt shingles, metal, wood, and other roof systems ▪ Helps upgrade the UL Fire Rating of many roofing systems (always see the UL Certification Directory) and helps resist dangerous flame spread ▪ 42" x 100' (1.07 m x 30.48 m); 3.5 Sq. (350 ft² [32.5 m²]) roll size - excludes laps

¹ To qualify for this coverage, must be installed with GAF Lifetime Shingles and at least 3 qualifying GAF Accessories. See GAF.com/LRS for qualifying products and see GAF Roofing System Limited Warranty for complete coverage and restrictions.

For the full collection visit gaf.com/roofdeckprotection

Starter Strip Shingles

Help guard against shingle blow-offs at the eaves and rakes



<p>WeatherBlocker™</p>		<ul style="list-style-type: none"> ▪ Premium starter strip shingles for all asphalt shingles ▪ Extra-wide format, pre-perforated design, and factory-applied Dura Grip™ Adhesive ▪ Full sheets measure 17" x 40" (432 mm x 1,016 mm) and cover 50 lin. ft. (15 lm) per bundle. Half sheets measure 8 ½" x 40" (216 mm x 1,016 mm) and cover 100 lin. ft. (30 lm) per bundle.
<p>QuickStart®</p>		<ul style="list-style-type: none"> ▪ Peel and stick starter strip roll for asphalt shingles having exposure of 6" (152 mm) or less ▪ Mineral surfacing with factory-applied Dura Grip™ Adhesive ▪ 9" x 33' (228 mm x 10 m) roll size
<p>Pro-Start®</p>		<ul style="list-style-type: none"> ▪ Starter strip shingles for most standard English and metric-sized asphalt shingles ▪ Pre-perforated design with factory-applied Dura Grip™ Adhesive ▪ Full sheets measure 13" x 38" (330 mm x 965 mm) and are split into half sheets measuring 6 ½" x 38" (165 x 965 mm) to cover 120.33 lin. ft. (36.69 lm) per bundle
<p>StarterMatch®</p>		<ul style="list-style-type: none"> ▪ Complementary-color starter strip shingles for Grand Sequoia® and Grand Canyon® Shingles ▪ Used in conjunction with WeatherBlocker™ ▪ Full sheets measure 13 ¼" x 40" (337 mm x 1,016 mm) and cover 60 lin. ft. (18.3 lm) per bundle

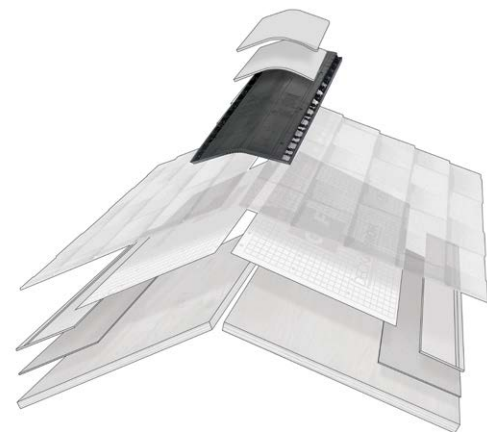
¹ To qualify for this coverage, must be installed with GAF Lifetime Shingles and at least 3 qualifying GAF Accessories. See GAF.com/LRS for qualifying products and see GAF Roofing System Limited Warranty for complete coverage and restrictions.

For the full collection visit gaf.com/starterstrip



Cobra® Attic Ventilation

Helps reduce attic moisture and heat*



Ridge & Hip Exhaust Ventilation

<p>Cobra® Exhaust Vent</p>		<ul style="list-style-type: none"> ▪ Mesh roll ridge vent for all climates ▪ 10 1/2" (267 mm), 8" (203 mm), and 11 3/4" (298 mm) widths; 20' (6.1 m) and 50' (15.24 m) lengths ▪ Includes Smart Nails™ (Hand Nailable) or 1 3/4" (44 mm) Coil Nails (Nail Gunnable) ▪ NFA: Hand Nailable - 16.9 sq. in./lin. ft. (35,772 mm² per lineal meter); Nail Gunnable - 14.1 sq. in./lin. ft. (29,845 mm² per lineal meter)
<p>Cobra® SnowCountry® Advanced</p>		<ul style="list-style-type: none"> ▪ Premium plastic ridge vent for colder climates ▪ Includes 3" (76 mm) ring shank nails, Snow Guard™ Filter & EasyTear® Sizing ▪ 11 1/2" (292 mm) and 9" (229 mm) widths; 4' (1.2 m) length, 40 lin. ft. (12.2 lm) per box ▪ NFA: 18 sq. in./lin. ft. (38,100 mm² per lineal meter)
<p>Cobra® SnowCountry®</p>		<ul style="list-style-type: none"> ▪ Plastic ridge vent for colder climates ▪ Includes Snow Guard™ Filter & EasyTear® Sizing ▪ 11 1/2" (292 mm) width; 4' (1.2 m) length, 40 lin. ft. (12.2 lm) per box ▪ NFA: 18 sq. in./lin. ft. (38,100 mm² per lineal meter)
<p>Cobra® Rigid Vent 3™</p>		<ul style="list-style-type: none"> ▪ Premium plastic ridge vent for warmer climates ▪ Includes 3" (76 mm) ring shank nails & EasyTear® Sizing ▪ 11 1/2" (292 mm) and 9" (229 mm) widths; 4' (1.2 m) length, 40 lin. ft. (12.2 lm) per box ▪ NFA: 18 sq. in./lin. ft. (38,100 mm² per lineal meter)
<p>Cobra® RidgeRunner®</p>		<ul style="list-style-type: none"> ▪ Plastic roll ridge vent for all climates ▪ Includes 1 3/4" (44 mm) coil nails, Weather Fighter® Filter & EasyTear® Sizing ▪ 11 1/2" (292 mm) width; 20' (6.1 m) length ▪ NFA: 12.5 sq. in./lin. ft. (26,458 mm² per lineal meter)
<p>Cobra® Hip Vent</p>		<ul style="list-style-type: none"> ▪ Plastic hip vent for all climates ▪ Includes 1 3/4" (44 mm) coil nails and Dual Weather Fighter® Filter ▪ 11 1/2" (292 mm) width; 4' (1.2 m) length, 40 lin. ft. (12.2 lm) per box ▪ NFA: 9 sq. in./lin. ft. (19,050 mm² per lineal meter)
<p>Intake Ventilation</p>		
<p>Cobra IntakePro®</p>		<ul style="list-style-type: none"> ▪ Tapered roll intake vent for all climates ▪ Includes 1 3/4" (44 mm) coil nails and end cap fabric ▪ 11" (279 mm) width; 20' (6.1 m) length ▪ NFA: 9 sq. in./lin. ft. (19,050 mm² per lineal meter) 1. See photo for product placement

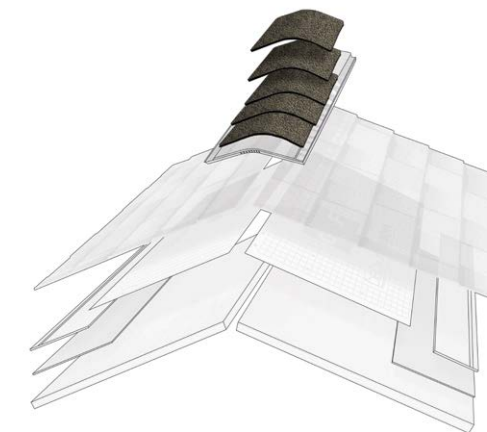
For more details visit gaf.com/cobra

¹ To qualify for this coverage, must be installed with GAF Lifetime Shingles and at least 3 qualifying GAF Accessories. See GAF.com/LRS for qualifying products and see GAF Roofing System Limited Warranty for complete coverage and restrictions.



Ridge Cap Shingles

The finishing touch that helps defend against leaks at the hips and ridges



<p>TimberTex®</p>			<ul style="list-style-type: none"> ▪ Premium double-layer ridge cap shingles for use with Timberline® HDZ™, NS, AH, UHD, & GAF Designer Lifetime Shingles ▪ Pre-perforated design & factory-applied Dura Grip™ Adhesive ▪ 12" (305 mm) width, 8" (203 mm) exposure, covers 20 lin. ft. (6.1 lm) per bundle ▪ Available in all areas (except West area)
<p>Seal-A-Ridge®</p>			<ul style="list-style-type: none"> ▪ Traditional look ridge cap shingles for use with Timberline® HDZ™, NS, AH, UHD, and CS Shingles ▪ Pre-perforated design & factory-applied Dura Grip™ Adhesive ▪ 12" (305 mm) width, 6 2/3" (169 mm) exposure, covers 25 lin. ft. (7.6 lm) per bundle ▪ Available in all areas
<p>TimberCrest®</p>			<ul style="list-style-type: none"> ▪ Premium SBS-modified bullnose ridge cap shingles for use with Timberline® HDZ™, NS, AH, UHD, RS/RS+, CS, and GAF Designer Lifetime Shingles ▪ Pre-folded/flexed design & factory-applied Dura Grip™ Adhesive ▪ 10" (254 mm) and 8" (203 mm) widths, 8" (203 mm) exposure, covers 20 lin. ft. (6.1 lm) per box ▪ Available in the West area
<p>Ridglass®</p>			<ul style="list-style-type: none"> ▪ High-profile SBS-modified ridge cap shingles for use with Timberline® HDZ™, NS, RS/RS+, and UHD Shingles ▪ Pre-folded design & factory-applied Dura Grip™ Adhesive ▪ 10" (254 mm) and 8" (203 mm) widths, 8" (203 mm) exposure, covers 31 lin. ft. (9.4 lm) per box ▪ Available in the West area
<p>Z®Ridge</p>			<ul style="list-style-type: none"> ▪ Wood shake-look ridge cap shingles for use with Timberline® HDZ™, NS, and UHD Shingles ▪ Pre-perforated design with unique Z-fold design ▪ 10" (254 mm) width, 5 5/8" (143 mm) exposure, covers 33.3 lin. ft. (10.1 lm) per bundle ▪ Available in the Southwest and West areas
<p>Seal-A-Ridge® AS</p>			<ul style="list-style-type: none"> ▪ UL Class 4 impact resistance, pre-perforated design & factory-applied Dura Grip™ Adhesive ▪ For use with GAF ArmorShield® Series and Glenwood® Shingles. ▪ 12" (305 mm) width, 5" (127 mm) exposure, covers 25 lin. ft. (7.6 lm) per bundle

For more details visit gaf.com/ridgecaps

GAF MasterFlow[®]

Ventilation Products

Ventilation products that help minimize heat and moisture in attics, while helping to resist mold and mildew



<p>Power attic vents - roof mount</p>	<p>1</p> 	<ul style="list-style-type: none"> Exhaust large amounts of heat and moisture from the attic High-efficiency PSC motors Thermostat control included on all models. Optional combo humidistat/thermostat control available on select models Available in popular colors to complement most finished roofs Also available in gable mount
<p>Solar-powered vents</p>	<p>2</p> 	<ul style="list-style-type: none"> Helps reduce electricity costs associated with operating a fully electric powered vent¹ Available in both solar-powered and unique dual-powered models Solar-powered models run off the sun's power, while dual-powered models switch automatically between sun and house power Thermostat or combo humidistat/thermostat control available on select models
<p>Roof louvers</p>	<p>3</p> 	<ul style="list-style-type: none"> Allow heat and moisture to escape the attic on roofs with limited ridge Styles: Slant-back, square-top, dome Construction: Aluminum, galvanized, plastic, granule-coated Net Free Area per Vent: Options from 37 - 144 sq. in. (23,871 - 92,903 mm²)
<p>Aluminum ridge vent</p>		<ul style="list-style-type: none"> Allows heat and moisture to escape the attic Construction: Aluminum with built-in baffle Net Free Area: 21.5 Sq. in. per lin. ft. (45,508 mm² per lineal meter)
<p>Wind turbines</p>		<ul style="list-style-type: none"> Use wind power to pull heat and moisture from the attic Sizes: 12" (305 mm) & 14" (356 mm) Construction: Aluminum internally braced, galvanized internally, or externally braced
<p>Soffit/under-eave intake vents</p>		<ul style="list-style-type: none"> Allow cooler dry air to enter the attic Styles: Continuous, oval, rectangular, EmberShield[®] closeable Net Free Area per Vent: Options from 22-68 Sq. in. (14,194 - 43,871 mm²)
<p>Other vents and accessories</p>		<p>Also available: Master Flow[®] Gable Wall Louvers, Goose Neck Vents, Vent Caps, Chimney Caps, Zinc Strips, Whole House Fans, and Foundation Vents</p>

For the full collection visit gaf.com/masterflow

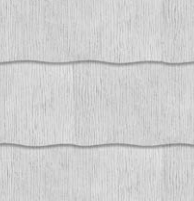

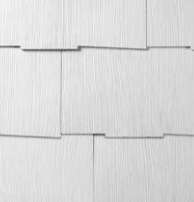
GAF WeatherSide[™]

Fiber-Cement Siding




The one and only solution for replacing old asbestos siding



Siding - contains NO asbestos¹

<p>Purity[™] Shingle</p>		<p>Textured surface with straight, wavy, or thatched edge</p>	<ul style="list-style-type: none"> Size: 12" x 24" (305 mm x 609 mm) Exposure: Straight & Wavy 11" (279 mm), Thatched 10 1/2" (267 mm)
<p>Profile Shingle</p>		<p>Striated surface with straight edge</p>	<ul style="list-style-type: none"> Size: 9" x 32" (227 mm x 813 mm) Exposure: 8" (203 mm) Size: 12" x 24" (305 mm x 609 mm) Exposure: 11" (279 mm) Size: 14 5/8" x 32" (371 mm x 813 mm) Exposure: 13 5/8" (346 mm)
<p>Emphasis[™] Shingle</p>		<p>Extra-thick wood grain look surface with thatched edge</p>	<ul style="list-style-type: none"> Size: 14 5/8" x 25 5/32" (371 mm x 639 mm) Exposure: 13" (330 mm)

Accessories

<p>Siding Backer Strips</p>		<p>Help protect the vertical seams between each piece of siding against weather infiltration</p>	<ul style="list-style-type: none"> 9" (227 mm) 12" (305 mm) 14" (357 mm)
<p>Hot-dipped Galvanized Siding Nails</p>		<p>Help provide maximum holding power and an excellent finished look</p>	<ul style="list-style-type: none"> White, ring shank nails 1 3/4" (44 mm)
<p>Pre-primed Individual Corners</p>		<p>Complete the outside corners of your WeatherSide[™] Siding job</p>	<ul style="list-style-type: none"> 9" (227 mm) 12" (305 mm) 14" (357 mm) Emphasis[™] corners

Visit gaf.com/weatherside

GAF **ThermaCal**[®]
Building Envelope Insulation Panels

Help reduce heat drive into conditioned/living spaces, and ventilated options exhaust excess moisture to reduce the risk of condensation in the roofing system¹



Ventilated Roof Insulation Panels

<p>ThermaCal[®] 1</p>		<ul style="list-style-type: none"> For asphalt shingle and metal roof systems Nominal 4' x 8' (1.21 m x 2.44 m) panels with single layer of sheathing (7/16" OSB [11.1 mm] standard); other options available Includes air space and tongue-and-groove polyiso foam to reduce heat loss through panel joints Pre-spaced sheathing eliminates the need for H-clips and allows for sheathing expansion
<p>ThermaCal[®] 2</p>		<ul style="list-style-type: none"> For slate, tile, and maximum loading roof systems Nominal 4' x 8' (1.21 m x 2.44 m) panels with two layers of sheathing (7/16" OSB [11.1 mm] standard); other options available Includes air space and tongue-and-groove polyiso foam to reduce heat loss through panel joints Pre-spaced sheathing eliminates the need for H-clips and allows for sheathing expansion

Non-Ventilated Roof Insulation Panels

<p>ThermaCal[®]</p>		<ul style="list-style-type: none"> For metal roof systems Nominal 4' x 8' (1.21 m x 2.44 m) panels with single layer of sheathing (7/16" OSB [11.1 mm] standard); other options available Tongue-and-groove polyiso foam to reduce heat loss through panel joints Pre-spaced sheathing eliminates the need for H-clips and allows for sheathing expansion
-------------------------------------	--	---

Exterior Wall Insulation Panels

<p>ThermaCal[®] Wall</p>		<ul style="list-style-type: none"> Nominal 4' x 8' (1.21 m x 2.44 m) panels with one layer of sheathing (7/16" OSB [11.1 mm] standard); other options available Includes tongue-and-groove polyiso foam (8' [2.44 m] sides only) to reduce heat loss through panel joints Pre-spaced sheathing (8' [2.44 m] sides) allows for precision fit and sheathing expansion
--	--	--

Nail Base Insulation Panel Fasteners

<p>ThermaCal[®] Light-duty drill point fasteners</p>		<ul style="list-style-type: none"> Designed for attaching ThermaCal[®] Insulation Panels to steel roof decks/substrates Manufactured with case-hardened and tempered carbon steel
<p>ThermaCal[®] Thread point fasteners</p>		<ul style="list-style-type: none"> Designed for attaching ThermaCal[®] Insulation Panels to wood roof decks/substrates Manufactured with case-hardened and tempered carbon steel

For the full collection visit gaf.com/thermacal

GAF **LIBERTY**[™]
SBS Self-Adhering Roofing System

Self-adhering low-slope roofing systems. Perfect for porches, garages, car ports, and sunrooms!



For the full collection visit gaf.com/liberty

Before you bid on only half this roof



Talk to GAF first

The partners you count on to support your roofing business are ready to champion your growth in whatever direction you want to go. GAF offers a full line of low-slope and steep-slope roofing systems. Technical support. Expert training. And excellent warranties and guarantees backed by North America's largest roofing manufacturer. If you're ready to grow, talk to GAF, first. [gaf.com/TalktoGAF](https://www.gaf.com/TalktoGAF)



SPECIFICATION SHEET



Tri-Shield Housewrap is available in widths ranging from 3' to 10' and roll lengths of 100', 150' and 195'.

PRODUCT SPECIFICATIONS		
MATERIAL	WOVEN POLYPROPYLENE	TEST METHOD
THICKNESS	AVG 5.0 MILS	
WEIGHT	1.92 OZ/SQ.YD (+/- 5%)	ASTM D 751
TENSILE STRENGTH	WARP 68 lbs FILL 44 lbs	ASTM D 5034
TRAPEZOIDAL TEAR	WARP 30 lbs FILL 19 lbs	ASTM 4533
WATER RESISTANCE	PASS	ASTM 779
WATER VAPOUR TRANSMISSION	12-15 PERM (Tri-Shield Regular) 8-12 PERM (Drainage Wrap)	ASTM E 96A
AATCC 16 PART 3 LIGHT RESISTANCE (uv) 100, 200, 300 HRS	NO DEGRADATION OR LOSS OF STRENGTH	

Note: It is the responsibility of the buyer to independently certify the housewrap for their own specific applications.



TimberCrest Vinyl Siding Specifications

PART 1 – GENERAL

1.01 Scope of Work

- A. Furnish all necessary labor, material and equipment for complete installation of **ABTCO** Vinyl Siding and related work as shown on drawings or specified herein.

1.02 References

- A. American Society for Testing and Materials (ASTM)
- ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics
- ASTM D618 - Standard Practices for Conditioning Plastics for Testing
- ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
- ASTM D638 - Standard Test Method for Tensile Properties of Plastics
- ASTM D648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position
- ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer
- ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- ASTM D1929 - Standard Test Method for Determining Ignition Temperature of Plastics
- ASTM D2843 - Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics
- ASTM D3679 - Standard Specification for Rigid Poly-Vinyl Chloride (PVC) Siding
- ASTM D4216 - Standard Specification for Rigid Poly-Vinyl Chloride (PVC) and Related PVC and Chlorinated Poly-Vinyl Chloride (CPVC) Building Products Compounds
- ASTM D4226 - Standard Test Methods for Impact Resistance of Rigid Poly-Vinyl Chloride (PVC) Building Products
- ASTM D5206 - Standard Test Method for Wind-load Resistance of Rigid Plastic Siding
- ASTM D6864 - Standard Specification for Color and Appearance Retention of Solid Colored Plastic Siding Products
- ASTM D7251 - Standard Specification for Color and Appearance Retention of Variegated Color Plastic Siding Products
- ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials

1.03 Submittals

- A. Submit samples of siding design, size and color for approval.
- B. Product data: Manufacturers standard printed product data and installation instruction for specified products.
- C. Selection samples: Submit color chips of manufacturer's full range of colors for Architects selection.
- D. Verification samples: Submit three samples, each 12 inch in length, of each specified vinyl product in the specified color.
- E. Quality assurance submittals: Submit evidence of Code compliance specified in the quality assurance section of this specification.

1.04 Quality Assurance

- A. Manufacturer to certify that vinyl siding as supplied meets or exceeds the conditions specified in section 2.02.
- B. Regulatory compliance:
1. ICC Evaluation Report ESR-1517
 2. HUD-FHA Minimum Property Standards
 3. Miami-Dade County Product Control Approved
 4. VSI Certified - Conforms to ASTM D3679

5. Florida Building Code 2014 Approved
6. Evaluation Listing CCMC 13185-L

1.05 Delivery, Storage and Handling

- A. Siding is packed in cardboard cartons identified with stickers bearing the manufacture's name, product name, product code, number of pieces, size, and date of manufacture.
- B. Prior to application, vinyl siding and accessories are to be stored in an area that is clean, dry and out of direct sunlight
- C. Handle material in a manner to prevent damage. Do not allow siding material to crease.

1.06 Warranty

- A. Upon completion provide a written Lifetime, Transferable, Limited Warranty and for Non-Residential a Fifty Year Warranty

PART 2 – PRODUCTS

2.01 Manufacturer

- A. Materials to be supplied by **ABTCO** Building Products., www.kpproducts.com
- B. Substitutions not permitted.

2.02 Materials

- A. Vinyl siding shall conform to all of the requirements established in ASTM Specification D3679, developed in cooperation with the industry and published by the American Society for Testing and Materials. Manufacturer shall maintain rigorous production quality control standards to assure that **ABTCO** Vinyl Siding will perform as expected for its intended use.

- B. **Typical Compound Properties:** Vinyl siding is produced from **ABTCO's** exclusive Ultra-Vinyl formula: a Poly Vinyl Chloride (PVC) compounds meeting the requirements of ASTM D3679 and ASTM D4216 with the following manufacturing and product specifications.

Test Criteria: Typical Properties

Tensile Strength (ASTM D638): 7000 psi

Modulus of Elasticity ASTM D638): 400,000 psi

Izod Impact @70⁰ F (ASTM D 256):

4.20 lb./in. notch

Izod Impact @32⁰ F (ASTM D 256):

2.40 lb./in. notch

Deflection Temperature with 264 psi load (ASTM D648):

175⁰ F (79.4⁰ C)

- C. **Fire Resistance Properties:**

Average Time of Burning (ASTM D635) : <5 sec

Average Extent of Burning (ASTM D635) : <5 mm

Flame Spread (ASTM E84): <23

Smoke Density Development (ASTM E84): 250

Fuel Contribution (ASTM E-84): 0

Smoke Density (ASTM D2843) : <50%

Ignition Properties (ASTM D1929): Self ignition did not occur. At 824⁰ F sample began to smolder and continued until consumed.

Fire resistance rating (ASTM E-119): 1 hour

- D. **Typical Physical Properties:**

Test Criteria: Typical Properties

Warp (ASTM D3679) : <0.125 in



TimberCrest Vinyl Siding Specifications

Heat Shrinkage (ASTM D3679) : <1.9%

Impact Resistance (ASTM D4226):
60 in-lbf (Procedure A, H.25)

Weatherability (ASTM D3679): No surface or structural defects such as peeling, cracking, chipping.

Coefficient of Linear Expansion (ASTM D3679):

3.00×10^{-5} in/in $^{\circ}$ F / 5.10×10^{-5} cm/cm $^{\circ}$ C

Gloss (ASTM D3679): plus or minus 8 units

Surface Distortion (ASTM D3679): No distortion at 120 $^{\circ}$ F

Windload Resistance (ASTM D 5206):

Wind speed up to 216 mph

Design Pressure up to -112 psf

E. Siding Dimensions and Description: (Select Profile)

TimberCrest Double 4 Dutch Lap: Double 4 Dutch Lap profile with Double thick .092 Cyclone System Nailing Hem, horizontal siding panel, 8 in. wide exposure configured as two 4 in. panels, 12ft-6in. length.

TimberCrest Double 4.5 Dutch Lap: Double 4.5 Dutch Lap profile with Double thick .092 Cyclone System Nailing Hem, horizontal siding panel, 9 in. wide exposure configured as two 4.5 in. panels, 12 ft-11/2 in. length.

F. Siding Panel Description:

Thickness: (0.046 in. \pm 0.001 in.) with .092 Cyclone System Nailing Hem

Embossing/Woodgrain: Siding panel to match the sample provided under section 1.03.

Color: Siding color shall be present throughout the thickness of the panel. Panels shall be produced using **ABTCO's** exclusive Ultra-Vinyl formulation. Siding color shall be as specified by architect.

Interlock: Siding panels are made with post form style lock with positive interlock. Both ends of the panel are factory cut and notched for overlap.

Nail Slots: Elongated nail slots 1" long are spaced approximately 1/2" apart in the nailing hem to allow siding to expand and contract properly.

Weep Holes: Small holes under the bottom butt prevent vapor build up and allow accumulated moisture to escape.

2.01 Accessories:

- A. Accessories shall be consistent with the shape, size and properties as shown in the drawing and as required for complete installation. Color shall be matched or color coordinated to the siding according to the architect's specifications.

Accessories shall be produced from the same compound materials and with comparable properties as the siding.

2.02 Fasteners:

- A. Galvanized nails or other corrosion-resistant fasteners, as recommended by manufacturer for specific application shall be used to install the siding.

PART 3 – EXECUTION

3.01 Examination

- A. Confirm that all critical dimensions are as specified in the drawings.
B. Commencement of siding installation implies acceptance of the substrate as suitable to accept siding.

3.02 Preparation

- A. Any substrate flaws or defects must be repaired, and free from obstructions before the vinyl siding is applied.

3.03 Installation

- A. Solid sheathing and a weather resistive barrier shall be provided behind the siding, as required by the applicable code.
B. Siding is installed with nails driven into furring strips or wall studs spaced not more than 16 in. on center. The siding fasteners are corrosion resistant nails with a minimum 11/32 in. diameter head and a 0.135 diameter shank.
C. Nails shall be long enough to penetrate the nailing base by at least 7/8 in.
D. Install in accordance with the latest edition of the "Vinyl Siding Installation Manual" published by the Vinyl Siding Institute.
E. The vinyl siding and accessories shall be installed in accordance with the best practice. Nails shall be centered in the siding nail slots with a minimum 1/16 in. clearance between the back of the nail head and the face of the siding. Nails shall be driven perpendicular to the substrate.
F. At all openings and stops, a minimum gap 1/4 in., shall be provided for expansion and contraction. Joints between panels shall be overlapped a minimum of 1 in., with all joint members plumb and true.

3.04 Field Quality Control

- A. After installation of siding check entire surface for obvious flaws or defects. Replace and repair any problem areas.

3.05 Cleaning

- A. After the vinyl siding has been applied, clean as necessary to remove all fingerprints and soiled areas.
B. Clean and remove all scrap, packaging and unused materials resulting from the installation of vinyl products.

All **ABTCO** Vinyl Sidings and accessories are backed by a Lifetime Limited Warranty.



Replacement Window Installation Guide

Non-Impact & Impact Resistant
Windows without Nailing Fin



American Craftsman Installation Guide

Project Requirements:

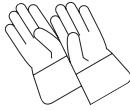
- Failure to follow these instructions may void product warranty.
- Read guide before starting installation. Read all warnings and cautions during installation.
- Due to ongoing product changes, updated test results and/or new industry best practices, this installation procedure may change over time. Visit the manufacturer's website for current installation instructions.
- This product is designed to be used as a replacement window installed into an existing "old style" wood double-hung window frame.
- Installation must comply with all applicable building codes.
- Existing window frame, wall and weather-resistant barrier must be adequate and window frame and wall must be structurally sound.
- Window must be installed to be plumb, level and square.
- The replacement window should be approximately 1/4" less in width and height than the existing window opening once the old sash and components have been removed. Head expander can be used if up to 1/2" less in height.
- Instructions are given for installation from the interior of the building.
- Contact local authorities or waste management companies for proper recycling and/or disposal of removed window or patio door.
- Visit the manufacturer's web site for removal instructions, additional installation information and/or guides.

American Craftsman Installation Guide

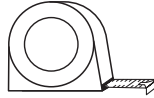
Tools & materials required:



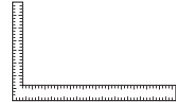
Safety glasses



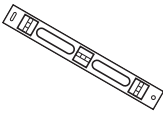
Work gloves



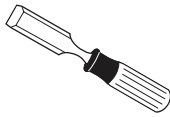
Tape measure



Framer's square



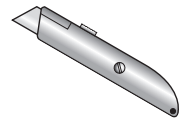
4' level



Chisel



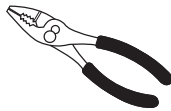
Putty knife



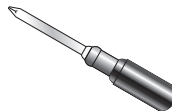
Utility knife or other cutting tool
(as needed)



Pry bar



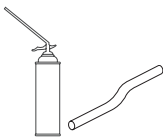
Pliers



Phillips hand screwdriver



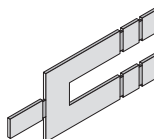
Power driver and bits



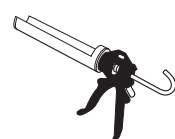
Backer rod/
Minimum expanding
foam sealant



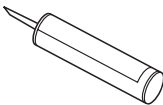
Fiberglass insulation



Shims



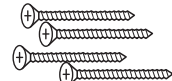
Caulk gun



Interior and exterior
window grade
sealant



Finish nails



4 - #8 x 2" flat head
screws
(for single-hung window
installation only)



Hammer

American Craftsman Installation Guide

Warnings and Cautions:

⚠ WARNING

Use caution when working at elevated heights and around unit openings. Follow manufacturers' instructions for ladders and/or scaffolding. Failure to do so may result in injury or death.

⚠ WARNING

Follow manufacturers' instructions for hand or power tools. Always wear safety glasses. Failure to do so may result in injury and/or product damage.

⚠ WARNING

Windows and doors can be heavy. Use safe lifting techniques and a reasonable number of people to move and install window and door products to avoid injury or product damage.

⚠ WARNING

Sill weep doors are small parts and, if swallowed, could pose a choking hazard to young children.

⚠ WARNING

Contains small parts. If swallowed could pose a choking hazard to young children. Remove and dispose of any loose or easily removed parts.

⚠ WARNING

Before, during, and after installation, place all tools as well as any casing or window parts on a drop cloth or in a location that will not pose a hazard to installers, customers, or property.

⚠ WARNING

Support window in opening while shimming. Failure to do so may result in injury and/or product/property damage.

⚠ WARNING

Do not leave the window opening unattended, especially when small children are present. A fall from the window opening could cause death or serious injury.

⚠ WARNING

Unless specifically ordered, this window does not have safety glass, and if broken, could cause injury. Many laws and building codes require safety glass in locations adjacent to or near doors. This window is available with safety glass that may reduce the likelihood of injury if broken. Information on safety glass is available from your sales representative.

CAUTION

Do not drill or fasten through sill. Product and/or property damage will result.

CAUTION

Do not overdrive screws or nails. Product damage may result.

CAUTION

Do not overfill with low expanding foam or overpack with backer rod to avoid bowed jams.

American Craftsman Installation Guide

Warnings and Cautions:**CAUTION**

Do not cover weep holes. Property damage may result.

CAUTION

The use of movable insulating materials such as window coverings, shutters, and other shading devices may damage glass and/or vinyl.

CAUTION

Follow instructions of foam, sealant and flashing manufacturer regarding material application and compatibility with this product.

CAUTION

Do not apply any type of film to glass. Thermal stress conditions resulting in glass damage could occur.

CAUTION

Weep holes must face the exterior and must be located at the bottom of the window or product and/or property damage may occur.

CAUTION

When insulating between unit frame and rough opening or between units when joining, **DO NOT** overpack batt insulation or overfill with foam. Bowed jambs will result affecting product performance and/or proper operation of unit.

CAUTION

Remove or cut ventilation holes in plastic shipping wrap if window is not installed immediately or product damage may occur.

CAUTION

Do not store windows flat or in the sun or product damage may occur.

CAUTION

Use masonry screw when fastening directly into masonry or through a buck into masonry.

NOTICE

Buildings constructed prior to 1978 may contain lead paint which could be disturbed during replacement. For more information on proper management of lead paint, visit www.epa.gov/lead

NOTICE

Important safety information. Leave this information for the building occupant.

American Craftsman Installation Guide

Fasteners:

⚠ WARNING

Metal fasteners and components may corrode when exposed to preservative-treated and/or fire-retardant treated lumber. Use approved fasteners and components to fasten unit. Failure to do so may cause a failure resulting in injury, property or product damage.

Finishing, Cleaning and Maintenance Instructions:

CAUTION

Do not stain or paint weatherstrip, vinyl, glass or hardware. Product damage may occur.

- ▶ **Read and follow finishing product instructions and warnings on finish material.**

CAUTION

Acid solutions used for cleaning masonry or concrete will damage glass, fasteners, hardware, vinyl and metal flashing.

Protect unit and follow cleaning product instructions carefully. If acid contacts unit, wash all surfaces with water immediately.

CAUTION

Abrasive cleaners will damage glass and vinyl surfaces.

- ▶ **Clean glass using liquid glass cleaner.**
- ▶ *Clean exterior frame, sash, and insect screens using mild detergent and water with a soft cloth or brush.*
- ▶ *For hard to clean areas use a nonabrasive cleaner, alcohol-and-water or ammonia-and-water.*
- ▶ *Do not apply any type of film to insulating glass. Thermal stress and glass damage can result. Shading devices (insulated coverings, shutters, etc.) may also cause thermal stress damage.*
- ▶ *For continued weather resistance of sealant joints, follow the sealant manufacturer's recommendations for periodic maintenance.*

American Craftsman Installation Guide

Florida Building Code Approved Fastener Chart

Application	Anchor Type	Anchor Size	Minimum Embedment	Minimum Clearance to Masonry Edge	Minimum Clearance to Adjacent Anchor
1X Buck or Masonry Frame	ITW	1/4"	1-1/4"	2-1/2"	3"
1X Buck or Masonry Frame	ELCO	1/4"	1-1/4"	1"	4"

This fastener schedule is provided as an example of fastening requirements. Requirements may vary by product, building type, application and region. Contact your local building code official for requirements in your area.

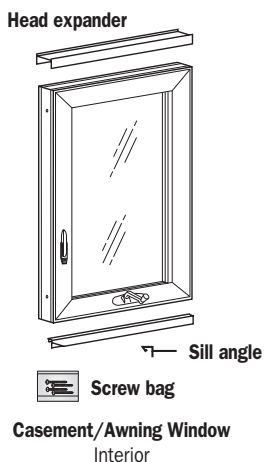
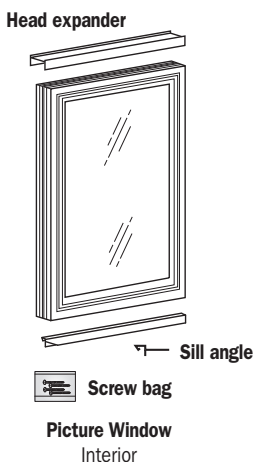
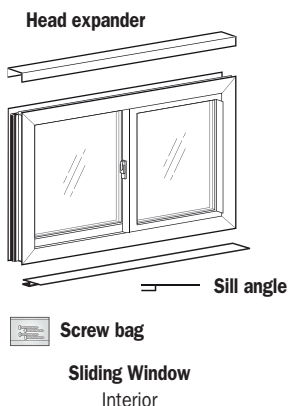
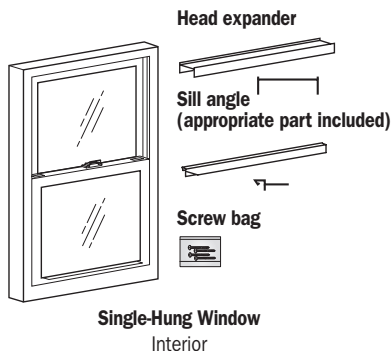
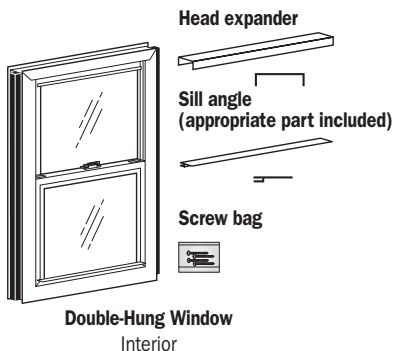
American Craftsman Installation Guide

Step 1

Inspect new window and verify opening.

Inspect for proper size and condition and verify that all parts are included. Inspect existing wall and rough opening for structural decay. Repair as needed.

Replacement Windows



Hardware Included:

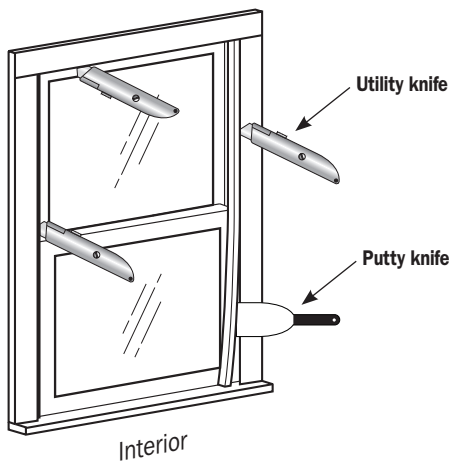
One hardware bag containing:

Quantity	Item
4	#8 x 2" Pan Head Screws

Step 2

Remove interior stops.

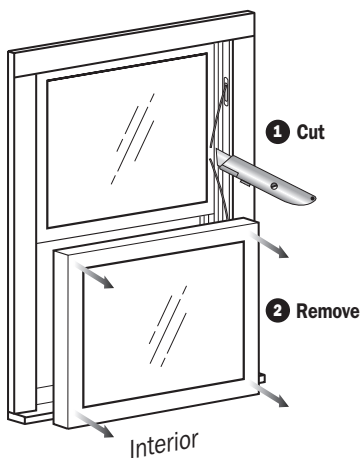
Carefully remove interior stops and save for later use.



Step 3

Remove bottom sash.

- 1 Cut bottom sash balance cords, if present. Balance systems may vary.
- 2 Remove bottom sash and dispose of properly.



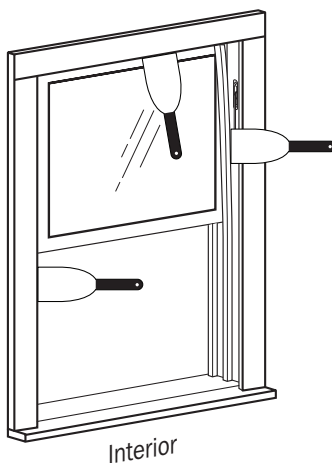
NOTE: If old window opening has wood top and side parting stops, proceed to Step 4 Wood Stops. If opening has metal tracks on the sides, proceed to Step 6 Metal Tracks.

American Craftsman Installation Guide

Step 4 Wood Stops

Remove top and side parting stops.

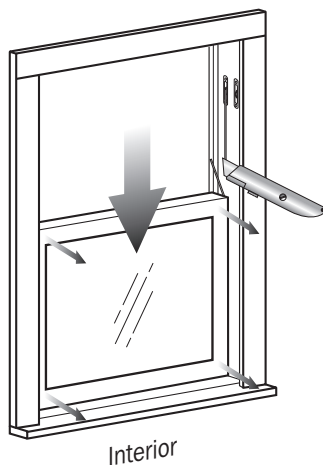
Remove top and side wood parting stops and dispose of properly.



Step 5 Wood Stops

Remove top sash.

Lower top sash to sill. Cut top sash balance cords, if present. Balance systems may vary. Remove top sash and dispose of properly.

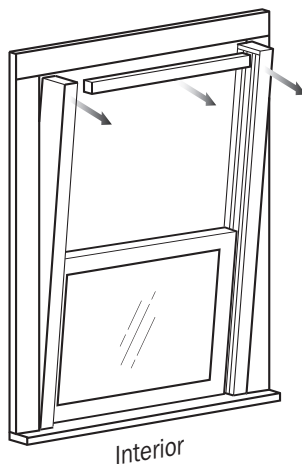


NOTE: Proceed to Step 7.

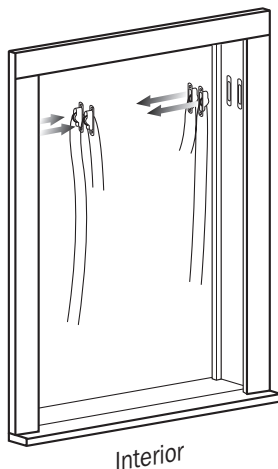
Step 6
Metal Tracks**Remove tracks and top sash.**

Lower top sash to sill. Remove top wood parting stop. Remove fasteners that attach metal tracks/jamb liners to the sides. Remove metal tracks and top sash together and dispose of properly. Be careful when removing metal tracks/jamb liners as springs may be under tension.

NOTE: Proceed to Step 7.

**Step 7****Remove old balance system.**

Remove old balance system including any pulleys and dispose of properly.



American Craftsman Installation Guide

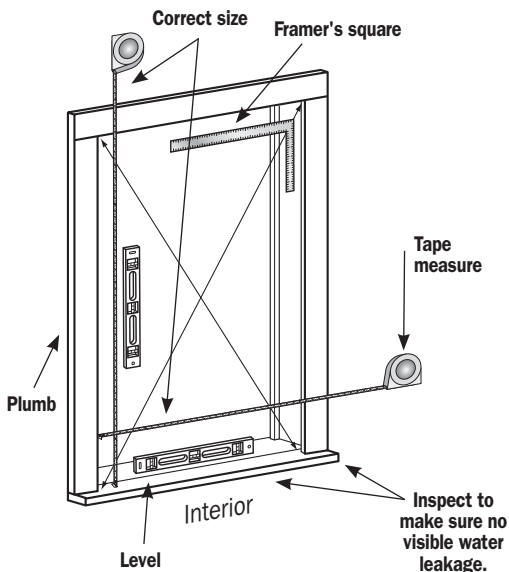
Step 8

Inspect opening.

Make sure opening is structurally sound.

Make sure opening is plumb, level and square.

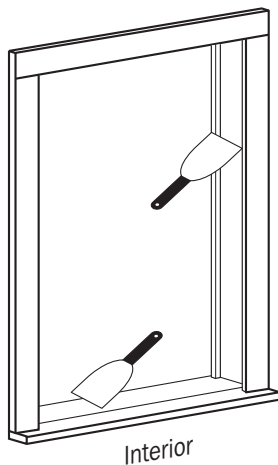
Measure the opening at the smallest width and height, vertically and horizontally to verify size. Remember to check to make sure the opening is square by measuring diagonally. Measurements must be within 1/8".



Step 9

Prepare opening.

Clean opening of all debris. Remove any protruding fasteners. Insulate any large areas as needed. Cover or fill all holes.

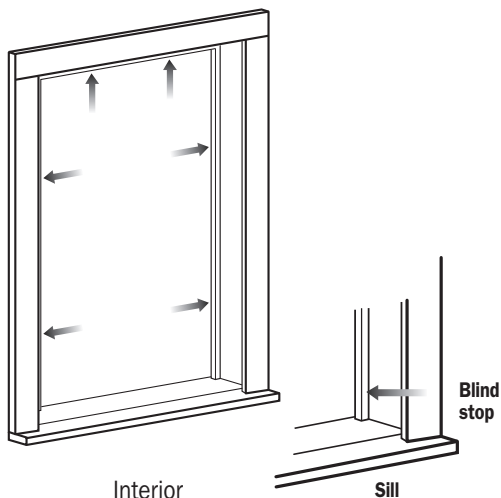


American Craftsman Installation Guide

Step 10

Verify blind stop.

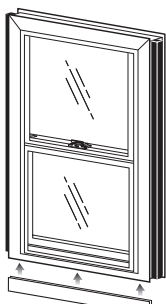
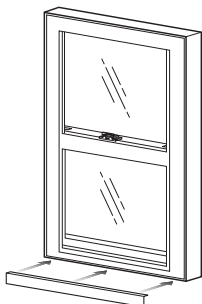
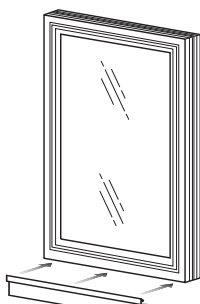
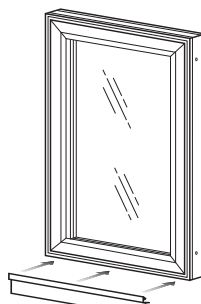
Leave existing blind stop intact. If any portion of the blind stop is damaged, the entire stop will need to be replaced.



Step 11

Install sill angle if needed.

If sill of existing window opening is slanted, install supplied sill angle in the groove on the bottom of the window. Determine appropriate sill angle placement for either double-hung or single-hung as shown.

Double-Hung and Sliding**Sill angle****Single-Hung****Sill angle****Picture****Sill angle****Casement and Awning****Sill angle**

Exterior

Replacement Windows

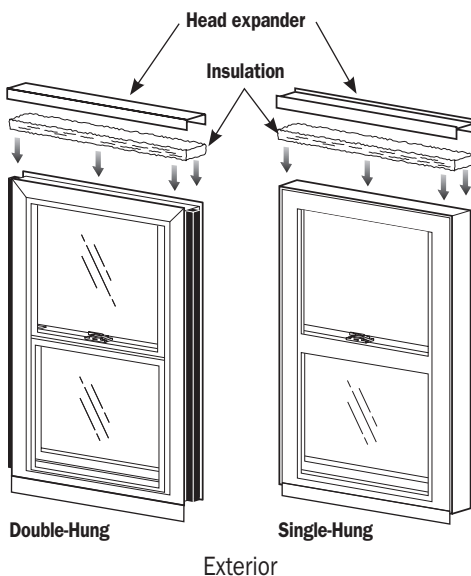
American Craftsman Installation Guide

Step 12

Install head expander if needed.

If the height of the window opening is higher than what will be covered with interior stops, then place the supplied head expander on top of the window as shown. It is recommended to add fiberglass insulation between head expander and window.

NOTE: Procedure is identical for double-hung, single-hung, sliding, picture, casement or awning windows.



Step 13

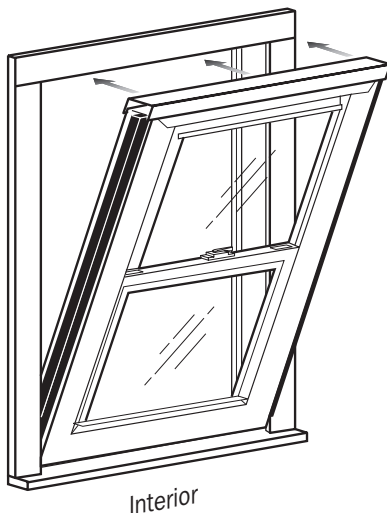
Check fit of window.

Temporarily place window into opening tilting in from bottom and check for fit.

Then remove window.

Adjust and trim sill angle as needed.

NOTE: Shown with optional head expander.

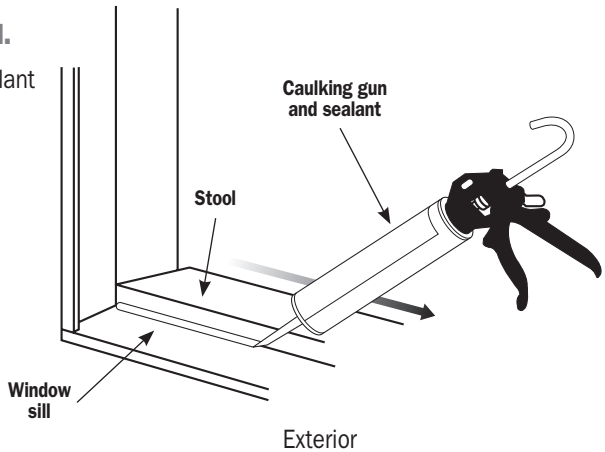


American Craftsman Installation Guide

Step 14

Apply sealant to sill.

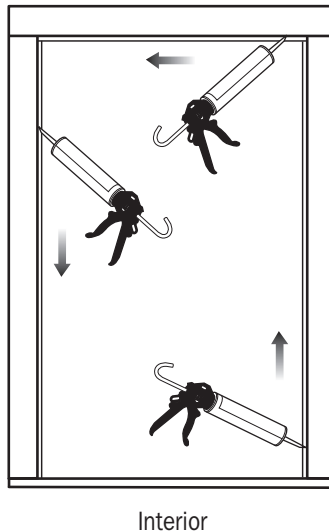
Apply 3/8" bead of sealant where the existing stool meets the window sill.



Step 15

Apply sealant to blind stop.

Apply 3/8" bead of sealant to inside edge of blind stop at top and both sides.



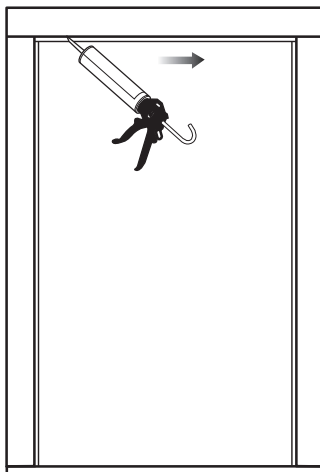
If using optional head expander, continue with Step 16. If not using optional head expander, proceed to Step 17.

American Craftsman Installation Guide

Step 16

Apply sealant to head of window for optional head expander.

Apply 3/8" bead of sealant to top of window frame in middle across the entire width of the opening if using head expander.



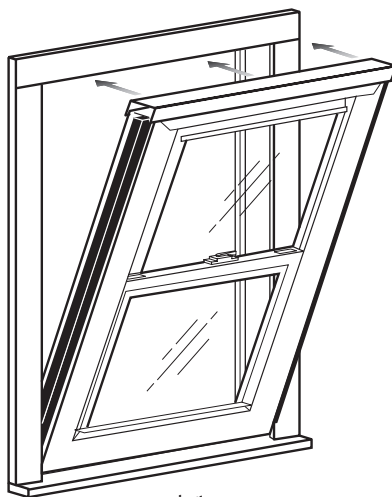
Interior

Step 17

Place window into opening.

Place window into opening, tilting in from bottom. Make sure sill angle and head expander remain in place if present. The bottom interior edge of the window should sit tight against the stool. If present, the head expander should be pushed up to meet the top of the opening.

NOTE: Shown with optional head expander.

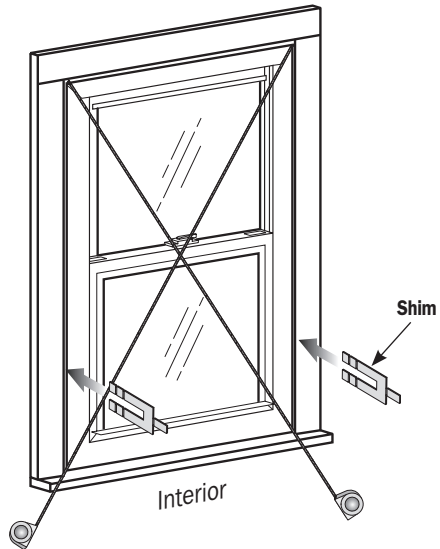


Interior

Step 18

Check for square.

Close and lock window. Measure diagonally across unit, upper left to lower right and upper right to lower left corner. If measurements are within $1/8$ ", unit is square. If unit is not square, adjust by inserting shims as needed. Do not over shim.

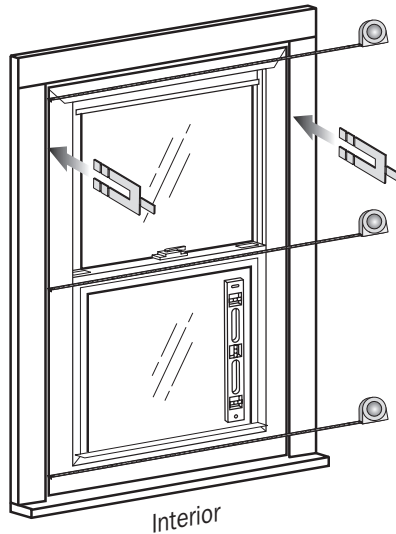


American Craftsman Installation Guide

Step 19

Check for plumb.

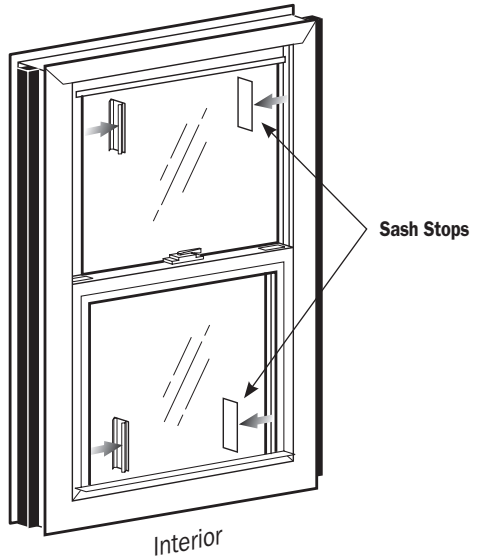
Measure across head, center and sill of unit. Center dimensions should match head and sill dimensions within $\frac{1}{8}$ ". Check for plumb. Shim to straighten side jambs as needed. Do not over shim.



NOTE: If installing a double-hung window, proceed to Step 20 Double-Hung. If installing a sliding, picture, casement or awning window, proceed to Step 22 Double-Hung, Sliding, Picture, Casement or Awning. If installing a single-hung window, proceed to Step 27 Single-Hung.

Step 20
Double-Hung**Access screw holes.**

Temporarily remove the top (if applicable) and bottom sash stops by gently prying them out of the jambs. Save them to re-install later, keeping track of location of each.



NOTE: If installing a double-hung window with 4 sash stops, proceed to Step 21 Double-Hung Balance Covers. Otherwise, proceed to Step 22 Double-Hung, Sliding, Picture, Casement or Awning.

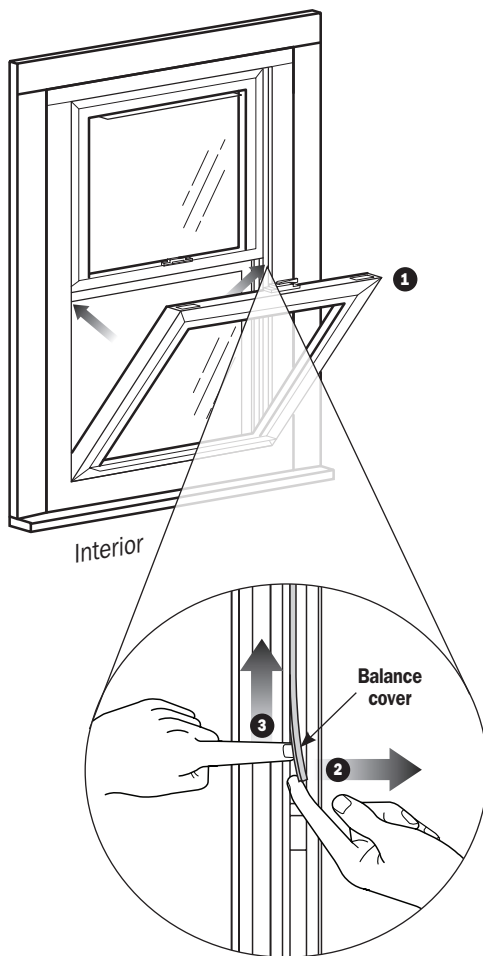
American Craftsman Installation Guide

Step 21 Double-Hung Balance Covers

Remove balance covers to access screw holes.

- 1 To access the balance covers, unlock and partially raise the bottom sash. Slide tilt latches and tilt the bottom sash in. Rest sash on sill.
- 2 Place your index finger at the bottom edge of the balance cover.
- 3 Pull the balance cover out of the jamb channel.

Repeat to remove the other balance cover. Then tilt the bottom sash back into place. Save both balance covers to re-install later.

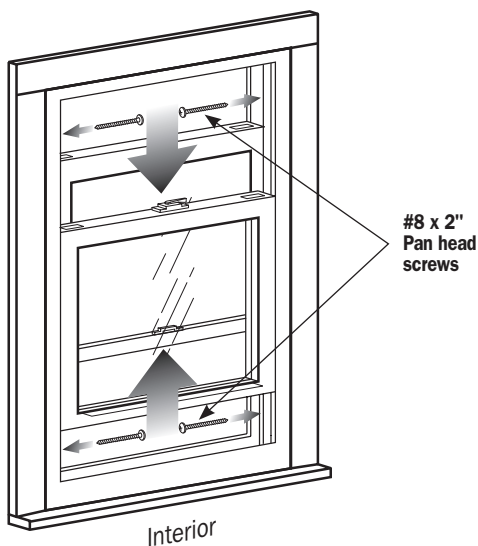


American Craftsman Installation Guide

Step 22
Double-Hung, Sliding,
Picture, Casement
or Awning**Fasten window.**

Unlock window and open sash to access screw holes.

Install supplied #8 x 2" pan head screws into the 2 screw holes in each jamb. Do not over tighten as this may distort the frame.



NOTE: If installing a double-hung window, proceed to Step 23 Double-Hung. If installing a sliding, picture, casement or awning window, proceed to Step 24 Double-Hung, Sliding, Picture, Casement or Awning.

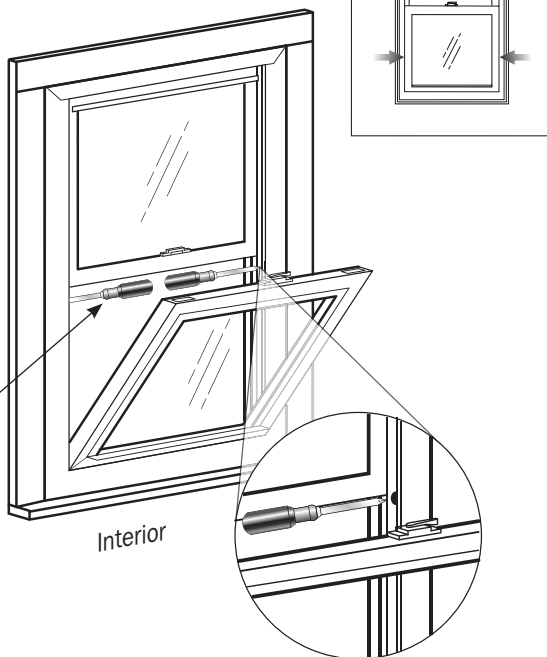
American Craftsman Installation Guide

Step 23 Double-Hung

Adjust sides.

To access the jamb adjusting screws, unlock and partially raise the bottom sash. Slide tilt latches and tilt the bottom sash in. Tighten the jamb adjusting screws located in the middle of the sides until the sight lines between the frame and sash are equal and uniform. Then tilt the bottom sash back into place.

Phillips
screwdriver

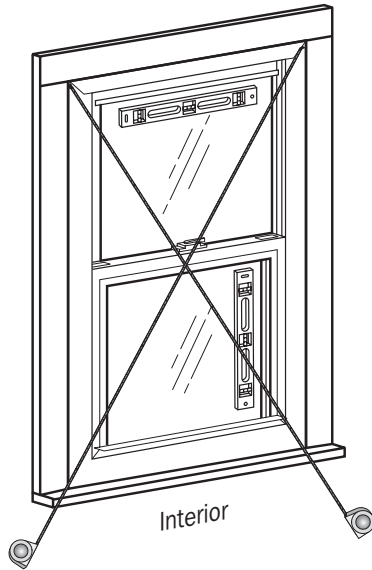


NOTE: Proceed to Step 24 Double-Hung, Sliding, Picture, Casement or Awning.

Step 24
**Double-Hung, Sliding,
Picture, Casement
or Awning**

**Check window
placement.**

Close and lock window.
Check window for
plumb, level and square.
Diagonal measurements
must be within 1/8".
Check sight lines. Check
sash operation. Adjust
screws and shims as
needed.



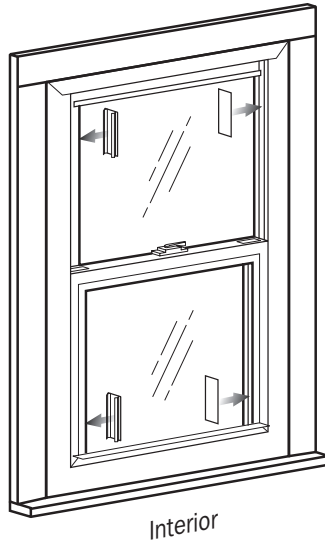
NOTE: If installing a double-hung window, proceed to Step 25 Double-Hung. Otherwise proceed to Step 30.

American Craftsman Installation Guide

Step 25 Double-Hung

Install sash stops.

Replace the top (if applicable) and bottom sash stops by installing them in the top and bottom of both sides.



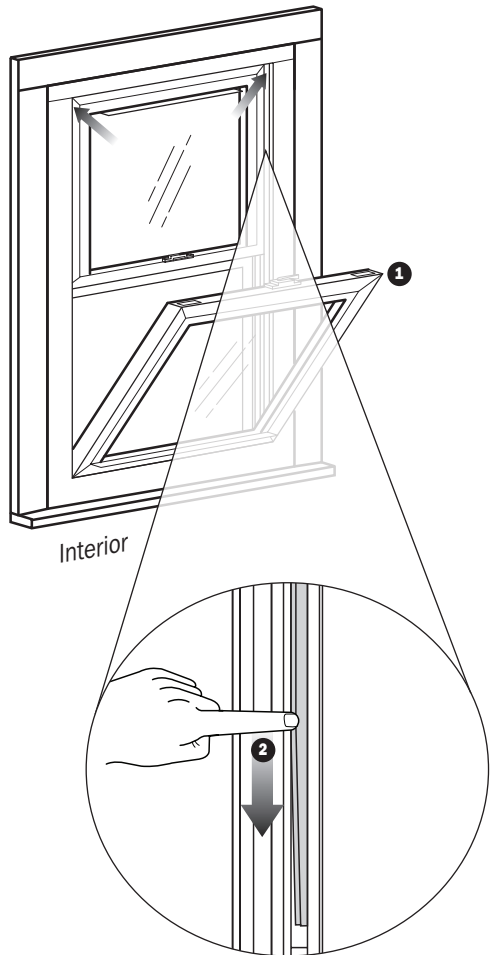
NOTE: If installing a double-hung window with 4 sash stops, proceed to Step 26 Double-Hung Balance Covers. Otherwise, proceed to Step 30.

Step 26
Double-Hung
Balance Covers

Install balance covers.

- 1 Tilt the bottom sash in.
- 2 Position the balance cover into the jamb, and make sure it is tight against the head of the unit. Insert the top portion of the balance cover into the jamb. Once attached, slide your finger along the balance cover down toward the sill, compressing the balance cover into the side jamb. Repeat to install the other balance cover.

NOTE: Proceed to
Step 30.

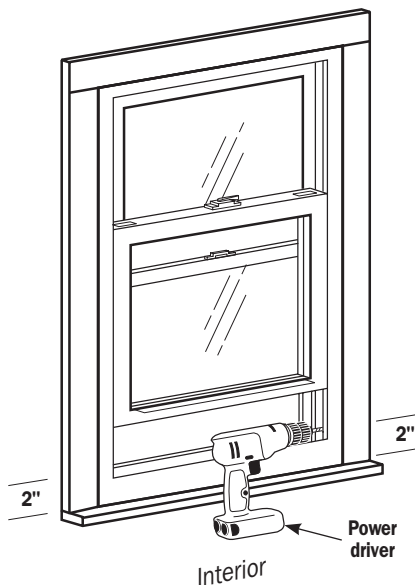


American Craftsman Installation Guide

Step 27 Single-Hung

Drill installation holes.

Open bottom sash. Drill one $\frac{3}{32}$ " installation hole in each side approximately 2" up from the bottom to penetrate structural supports at least 1".



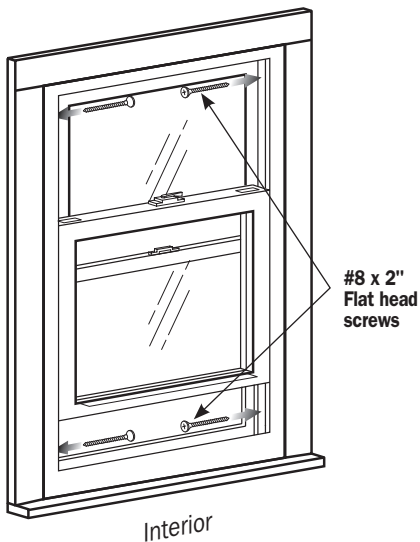
Step 28 Single-Hung

Fasten window.

Install #8 x 2" flat head screws (not supplied) into the 2 screw holes in each jamb. Do not over tighten as this may distort the window. Do not damage balance cords. Make sure screw heads are flush with surface of window to prevent interference with sash operation.

⚠ WARNING

Use caution to avoid damage to balance cords. Product failure may result.

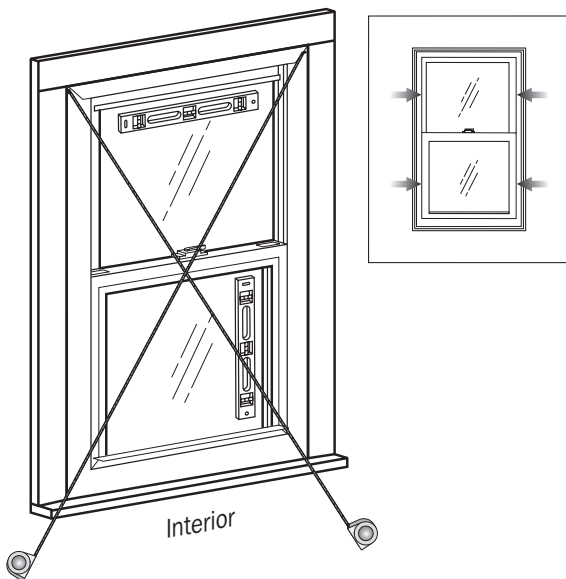


American Craftsman Installation Guide

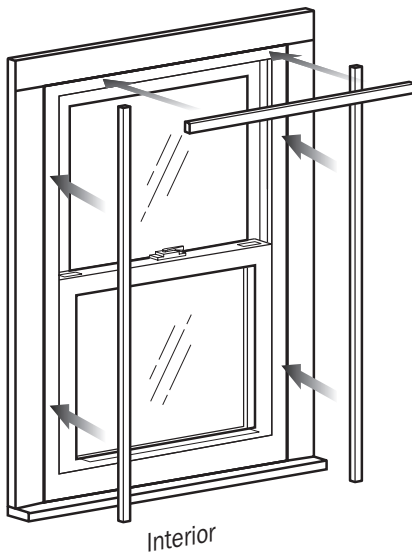
Step 29
Single-Hung**Check window placement.**

Close and lock window. Check window for plumb, level and square. Diagonal measurements must be within 1/8". Check sight lines. Check sash operation. Adjust screws and shims as needed.

NOTE: Proceed to Step 30.

**Step 30****Apply interior stops.**

Replace or add, if needed, interior stops against the window. Be careful not to damage the window.

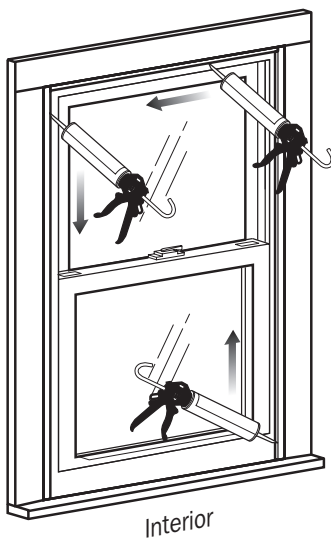


American Craftsman Installation Guide

Step 31

Apply sealant to interior.

Apply interior grade sealant to the interior of the window where the interior stops meet the window and where the head expander, if present, meets the window to seal any gaps.

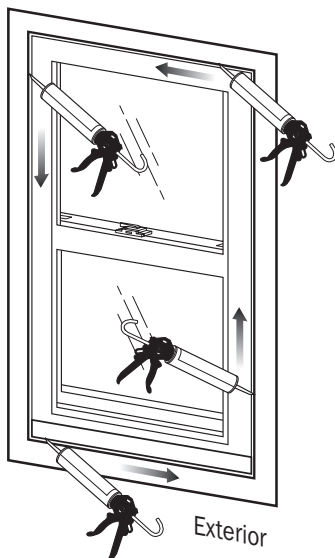


Step 32

Apply sealant to exterior.

Apply exterior grade sealant to the exterior of window where window meets framed opening around entire perimeter. Fill any old screw holes. Take care to make sure that all gaps and holes are sealed between the window and the wood frame.

Do not cover weep holes on bottom of window.



DEMOLITION

We have determined that the existing house located at 13320 Broadstreet Avenue, Detroit, MI. Does not require any further demolition work. Our considered opinion is rooted in a comprehensive evaluation of the property's structural integrity, architectural elements, and historical significance.

We consider that the current state of the house is suitable for the proposed renovation, and any further demolition would be unnecessary and potentially detrimental to the overall project objectives.

SITE IMPROVEMENTS

The site work planned at the outdoor environment will be just basic landscaping work and clean that aligns with the property's character while contributing to its overall visual appeal and functionality.

Scope:

The scope of this proposal includes the following key elements:

Grounds Clean-Up and Debris Removal

Enhancement of Outdoor Features

Tree Trimming and Pruning

Grounds Maintenance and Clean-Up